Chapter 21A.24 ENVIRONMENTALLY SENSITIVE AREAS

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- 21A.24.010 Purpose. The purpose of this chapter is to implement the goals and policies of the Washington State Environmental Policy Act, RCW 43.21C, and the King County Comprehensive Plan which call for protection of the natural environment and the public health and safety by:
- A. Establishing development standards to protect defined sensitive areas;
- B. Protecting members of the public and public resources and facilities from injury, loss of life, property damage or financial loss due to flooding, erosion, avalanche, landslides, seismic and volcanic events, soil subsidence or steep slope failures;
- C. Protecting unique, fragile and valuable elements of the environment including, but not limited to, wildlife and its habitat;
- D. Requiring mitigation of unavoidable impacts on environmentally sensitive areas by regulating alterations in or near sensitive areas;
- E. Preventing cumulative adverse environmental impacts on water availability, water quality, ground water, wetlands and streams;
- F. Measuring the quantity and quality of wetland and stream resources and preventing overall net loss of wetland and stream functions;
- G. Protecting the public trust as to navigable waters and aquatic resources;
- H. Meeting the requirements of the National Flood Insurance Program and maintaining King County as an eligible community for federal flood insurance benefits;
- I. Alerting members of the public including, but not limited to, appraisers, owners, potential buyers or lessees to the development limitations of sensitive areas; and
- J. Providing county officials with sufficient information to protect sensitive areas. (Ord. 11621 § 69, 1994: 10870 § 448, 1993).
- 21A.24.020 Applicability. A. The provisions of this chapter shall apply to all land uses in King County, and all persons within the county shall comply with the requirements of this chapter.
- B. King County shall not approve any permit or otherwise issue any authorization to alter the condition of any land, water or vegetation or to construct or alter any structure or improvement without first assuring compliance with the requirements of this chapter.
- C. Approval of a development proposal pursuant to the provisions of this chapter does not discharge the obligation of the applicant to comply with the provisions of this chapter.
- D. When any provision of any other chapter of the King County Code conflicts with this chapter or when the provisions of this chapter are in conflict, that provision which provides more protection to environmentally sensitive areas shall apply unless specifically provided otherwise in this chapter or unless such provision conflicts with federal or state laws or regulations.
- E. The provisions of this chapter shall apply to all forest practices over which the county has jurisdiction pursuant to RCW 76.09 and WAC 222. (Ord. $10870 \ \S 449$, 1993).

- 21A.24.030 Appeals. Any decision to approve, condition or deny a development proposal based on the requirements of K.C.C. 21A.24 may be appealed according to and as part of the appeal procedure for the permit or approval involved. (Ord. 10870 § 450, 1993).
- 21A.24.040 Sensitive areas rules. Applicable departments within King County are authorized to adopt, pursuant to K.C.C. 2.98, such administrative rules and regulations as are necessary and appropriate to implement K.C.C. 21A.24 and to prepare and require the use of such forms as are necessary to its administration. (Ord. 10870 § 451, 1993).
- **21A.24.050 Complete exemptions.** The following are exempt from the provisions of this chapter and any administrative rules promulgated thereunder:
- A. Alterations in response to emergencies which threaten the public health, safety and welfare or which pose an imminent risk of damage to private property as long as any alteration undertaken pursuant to this subsection is reported to the department immediately. The director shall confirm that an emergency exists and determine what, if any, mitigation shall be required to protect the health, safety, welfare and environment and to repair any resource damage;
- B. Agricultural activities as described below, in existence before November 27, 1990, and performed not less often than once every five years thereafter:
 - 1. Mowing of hay, grass or grain crops;
- 2. Tilling, discing, planting, seeding, harvesting, soil preparation, crop rotation and related activities for pasture, food crops, grass seed or sod if such activities do not take place on steep slopes;
- 3. Normal and routine maintenance of existing irrigation and drainage ditches not used by salmonids;
- 4. Normal and routine maintenance of farm ponds, fish ponds, manure lagoons and livestock watering ponds; and
 - 5. grazing by livestock.
- C. Public water, electric and natural gas distribution, public sewer collection, cable communications, telephone utility and related activities undertaken pursuant to county-approved best management practices, as follows:
- 1. Normal and routine maintenance or repair of existing utility structures or rights-of-way;
- 2. Relocation of electric facilities, lines, equipment or appurtenances, not including substations, with an associated voltage of fifty-five thousand volts or less, only when required by a local governmental agency which approves the new location of the facilities;
- 3. Replacement, operation, repair, modification, installation or construction in existing developed utility corridors, an improved county road right-of-way or county-authorized private roadway of all electric facilities, lines, equipment or appurtenances, not including substations;
- 4. Relocation of public sewer local collection, public water local distribution, natural gas, cable communication or telephone facilities, lines, pipes, mains, equipment or appurtenances, only when required by a local governmental agency which approves the new location of the facilities;
- 5. Replacement, operation, repair, modification, installation or construction of public sewer local collection, public water local distribution, natural gas, cable communication or telephone facilities, lines, pipes, mains, equipment or appurtenances when such facilities are located within an improved public right-of-way or county authorized private roadway;

- D. Maintenance, operation, repair, modification or replacement of publicly improved roadways as long as any such alteration does not involve the expansion of roadways or related improvements into previously unimproved rights-of-way or portions of rights-of-way;
- E. Maintenance, operation or repair of publicly improved recreation areas as long as any such alteration does not involve the expansion of improvements into previously unimproved recreation areas;
- F. Public agency development proposals only to the extent of any construction contract awarded before November 27, 1990, provided that any law or regulation in effect at the time of such award shall apply to the proposal;
- G. All clearing and grading activities which are exempt from the requirement for a clearing and grading permit as specified in K.C.C. 16.82.050, unless these activities require other permits or authorizations as specified in K.C.C. 21A.24.020.
- H. The following exempt activities are permitted in coal mine hazard areas, provided that the applicable landowner, operator or utility is made aware of potential hazards:
 - 1. Forest practices;
 - 2. Agricultural activities;
 - 3. Mining activities;
 - 4. Power, telephone, and cable television utility lines;
- 5. Grading, filling, stockpile removal, and reclamation activities performed in conjunction with or by the Department of Interior's Office of Surface Mining, Reclamation and Enforcement with the intent of eliminating or mitigating threats to human health, public safety, environmental restoration or protection of property; and
- 6. Land uses and activities that existed prior to November 30, 1998. (Ord. 13319 \S 6, 1998: Ord. 11621 \S 71, 1994: 10870 \S 452, 1993).
- 21A.24.060 Partial exemptions. A. The following are exempt from the provisions of this chapter and any administrative rules promulgated thereunder, except for the notice on title provisions, K.C.C. 21A.24.170 21A.24.180, and the flood hazard area provisions, K.C.C. 21A.24.230 21A.24.270:
- 1. Structural modification of, addition to or replacement of structures, except single detached residences, in existence before November 27, 1990 which do not meet the building setback or buffer requirements for wetlands, streams or steep slope hazard areas if the modification, addition, replacement or related activity does not increase the existing footprint of the structure lying within the above-described building setback area, sensitive area or buffer;
- 2. Structural modification of, addition to or replacement of single detached residences in existence before November 27, 1990 which do not meet the building setback or buffer requirements for wetlands, streams or steep slope hazard areas if the modification, addition, replacement or related activity does not increase the existing footprint of the residence lying within the above-described buffer or building setback area by more than 1000 square feet over that existing before November 27, 1990 and no portion of the modification, addition or replacement is located closer to the sensitive area or, if the existing residence is in the sensitive area, extends farther into the sensitive area; and

- 3. Maintenance or repair of structures which do not meet the development standards of this chapter for coal mine, landslide, seismic or volcanic hazard areas if the maintenance or repair does not increase the footprint of the structure and there is no increased risk to life or property as a result of the proposed maintenance or repair;
- B. The grazing of livestock is exempt from the provisions of this chapter and any administrative rules promulgated thereunder, except for the livestock restriction provisions, K.C.C. 21A.24.320 and 21A.24.360, and any animal density limitations established by law, if the grazing activity was in existence before November 27, 1990;
- C. A permit or approval sought as part of a development proposal for which multiple permits are required is exempt from the provisions of this chapter and any administrative rules promulgated thereunder, except for the notice on title provisions, K.C.C. 21A.24.170 21A.24.180, if:
 - 1. King County previously reviewed all sensitive areas on the site;
- 2. There is no material change in the development proposal since the prior review;
- 3. There is no new information available which is important to any sensitive area review of the site or particular sensitive area;
- 4. The permit or approval under which the prior review was conducted has not expired or, if no expiration date, no more than five years lapsed since the issuance of that permit or approval; and
- 5. The prior permit or approval, including any conditions, has been complied with. (Ord. $10870 \ \S \ 453$, 1993).
- **21A.24.070 Exceptions.** A. If the application of this chapter would prohibit a development proposal by a public agency and utility, the agency or utility may apply for an exception pursuant to this subsection:
- 1. The public agency or utility shall apply to the department and shall make available to the department other related project documents such as permit applications to other agencies, special studies and SEPA documents.
- 2. The department shall review the application based on the following criteria:
- a. there is no other practical alternative to the proposed development with less impact on the sensitive area; and
 - b. the proposal minimizes the impact on sensitive areas.
- 3. The department shall process exceptions, provide public notice, and provide opportunity for the public to request a public hearing, and provide an appeal process consistent with the provisions of K.C.C. 20.20.
- 4. This exception shall not allow the use of the following sensitive areas for regional stormwater management facilities except where there is a clear showing that the facility will protect public health and safety or repair damaged natural resources:
 - a. class 1 streams or buffers;
- b. class 1 wetlands or buffers with plant associations of infrequent occurrence; or
- c. class 1 or 2 wetlands or buffers which provide critical or outstanding habitat for herons, raptors or state or federal designated endangered or threatened species unless clearly demonstrated by the applicant that there will be no impact on such habitat.
- B. If the application of this chapter would deny all reasonable use of the property, the applicant may apply for an exception pursuant to this subsection:

- 1. The applicant may apply for a reasonable use exception without first having applied for a variance if the requested exception includes relief from standards for which a variance cannot be granted pursuant to the provisions of K.C.C. chapter 21A.44. The applicant shall apply to the department, and the department shall make a final decision based on the following criteria:
- a. the application of this chapter would deny all reasonable use of the property;
- b. there is no other reasonable use with less impact on the sensitive area;
- c. the proposed development does not pose an unreasonable threat to the public health, safety or welfare on or off the development proposal site and is consistent with the general purposes of this chapter and the public interest; and
- d. any alterations permitted to the sensitive area shall be the minimum necessary to allow for reasonable use of the property; and any authorized alteration of a sensitive area under this subsection shall be subject to conditions established by the department including, but not limited to, mitigation under an approved mitigation plan. (Ord. 13190 § 19, 1998: Ord. 12196 § 54, 1996: Ord. 11621 § 73, 1994: Ord. 10870 § 454, 1993).
- 21A.24.075 Modification or waiver of sensitive area requirements—urban lots. The purpose of this section is to provide an alternative to the variance, and exception processes for minor development. A further purpose of this section is to minimize impacts to sensitive areas by allowing minor modifications of the zoning code which allow single family residences on existing, legal urban lots without requiring a variance or exception. The director shall have the discretion to modify or waive some or all of the requirements of this title, including mitigation requirements, pertaining to class 3 wetlands, class 3 streams, and their associated buffers or building setback areas in accordance with the provisions of this section.
- A. An applicant may request a modification or waiver of sensitive area requirements pursuant to this section provided the lot or lots are located in an urban area designated in the King County Comprehensive Plan; and
- B. The applicant for the modification or waiver of sensitive area requirements shall submit any sensitive area special studies following a preapplication review meeting as required under K.C.C. 21A.24.110 as well as such other documents, studies, as requested by the director.
- C. The director may grant a modification or waiver of sensitive area requirements provided:
- 1. The proposal is the minimum necessary to accommodate the building footprint and access. In no case, however, shall the building footprint exceed 5000 square feet, including access,
- 2. Access is located so as to have the least impact on the sensitive area and its buffer,
- 3. The proposal preserves the functions and values of wetlands and streams to the maximum extent possible,

- 4. Adverse impacts resulting from alterations of steep slopes are minimized,
- 5. The proposal includes on-site mitigation to the maximum extent possible,
- 6. The proposal will not significantly affect drainage capabilities, flood potential, and steep slopes and landslide hazards either on neighboring properties or on the proposal itself; and
- 7. The proposal first develops nonsensitive area land, then the sensitive area buffer before the sensitive area itself is developed.

The director may require on-site or off-site mitigation measures to compensate for the loss of the functions and values of the sensitive areas and may impose mitigating conditions to the modification or waiver in order to meet the standards of this subsection C.

- D. Where a modification or waiver of sensitive area requirements under this section is proposed, the director shall give written mailed notice of the proposed modification or waiver to all owners of property located within three hundred feet of any boundary of the subject property and to the water and land resources division and shall allow fifteen calendar days for comment before making a decision. The decision of the director regarding the modification or waiver shall be mailed to the applicant and to any other person who requests a copy. The decision shall state the reasons for denial or any required mitigation or other conditions imposed. The decision of the director regarding the modification or waiver may be appealed per K.C.C. 21A.24.030.
- E. This section shall not apply to the following steep slope hazard areas:
- 1. Steep slope hazard areas that are unmitigatable landslide hazard areas; and
- 2. Steep slope hazard areas of slope greater than seventy percent where either the lot or slope are abutting and above a class 1 or 2 wetland stream, and associated buffer, or an open stormwater conveyance system. (Ord. 13190 § 20, 1998: Ord. 11621 § 70, 1994).
- 21A.24.080 Sensitive area maps and inventories. A. The distribution of many environmentally sensitive areas in western King County is displayed on maps in the Sensitive Areas Map Folio. Many of the wetlands are inventoried and rated and that information is published in the King County Wetlands Inventory Notebooks. Many flood hazard areas are mapped by the Federal Insurance Administration in a scientific and engineering report entitled "The Flood Insurance Study for King County." If there is a conflict among the maps, inventory and site-specific features, the department of development and environmental services shall verify the actual presence or absence of the features defined in this title as sensitive areas. The determination may be challenged by the property owner. (Ord. 11621 § 74, 1994: Ord. 10870 § 455, 1993).
- 21A.24.090 Disclosure by applicant. A. The applicant shall disclose to King County the presence of sensitive areas on the development proposal site and any mapped or identifiable sensitive areas within 100 feet of the applicant's property.
- B. If the development proposal site contains or is within a sensitive area, the applicant shall submit an affidavit which declares whether the applicant has knowledge of any illegal alteration to any or all sensitive areas on the development proposal site and whether the applicant previously has been found in violation of this chapter, pursuant to K.C.C. Title 23. If the applicant previously has been found in violation, the applicant shall declare whether such violation has been corrected to the satisfaction of King County. (Ord. 10870 § 456, 1993).

- 21A.24.100 Sensitive area review. A. King County shall perform a sensitive area review for any King County development proposal permit application or other request for permission to proceed with an alteration on a site which includes a sensitive area or is within an identified sensitive area buffer or building setback area.
 - B. As part of the sensitive area review, King County shall:
- 1. Determine whether any sensitive area exists on the property and confirm its nature and type;
 - 2. Determine whether a sensitive area special study is required;
 - 3. Evaluate the sensitive area special study;
- 4. Determine whether the development proposal is consistent with this chapter;
- 5. Determine whether any proposed alteration to the sensitive area is necessary; and
- 6. Determine if the mitigation and monitoring plans and bonding measures proposed by the applicant are sufficient to protect the public health, safety and welfare, consistent with the goals, purposes, objectives and requirements of this chapter. (Ord. 10870 § 457, 1993).
- 21A.24.110 Sensitive area special study requirement. A. An applicant for a development proposal which includes a sensitive area or is within an identified sensitive area buffer shall submit a sensitive area special study to adequately evaluate the proposal and all probable impacts.
- B. King County may waive the requirement for a special study if the applicant shows, to King County's satisfaction, that:
 - 1. There will be no alteration of the sensitive area or buffer;
- 2. The development proposal will not have an impact on the sensitive area in a manner contrary to the goals, purposes, objectives and requirements of this chapter; and
 - 3. The minimum standards required by this chapter are met.
- C. If necessary to insure compliance with this chapter, King County may require additional information from the applicant, separate from the special study. (Ord. $10870 \ \S \ 458$, 1993).
- 21A.24.120 Contents of sensitive area special study. A. The sensitive area special study shall be in the form of a written report and shall contain the following, as applicable:
- 1. Identification and characterization of all sensitive areas on or encompassing the development proposal site;
- 2. Assessment of the impacts of any alteration proposed for a sensitive area or buffer, assessment of the impacts of any alteration on the development proposal, other properties and the environment, and/or assessment of the impacts to the development proposal resulting from development in the sensitive area or buffer;
- 3. Studies which propose adequate mitigation, maintenance, monitoring and contingency plans and bonding measures;
 - 4. A scale map of the development proposal site; and
 - 5. Detailed studies, as required by King County.
- B. A sensitive area special study may be combined with any studies required by other laws and regulations; and
- C. If the development proposal will affect only a part of the development proposal site, the county may limit the scope of the required special study to include only that part of the site which may be affected by the development. (Ord. 10870 § 459, 1993).

- 21A.24.130 Mitigation, maintenance, monitoring and contingency. A. As determined by King County, mitigation, maintenance and monitoring measures shall be in place to protect sensitive areas and buffers from alterations occurring on the development proposal site.
- B. Where monitoring reveals a significant deviation from predicted impacts or a failure of mitigation or maintenance measures, the applicant shall be responsible for appropriate corrective action which, when approved, shall be subject to further monitoring. (Ord. 10870 § 460, 1993).
- 21A.24.140 Financial guarantees. Financial guarantees shall be required consistent with the provisions of Title 27A. (Ord. 12020 § 54, 1995: Ord. 10870 § 461, 1993).
- 21A.24.150 Vegetation management plan. A. For all development proposals where preservation of existing vegetation is required by this chapter, a vegetation management plan shall be submitted and approved prior to issuance of the permit or other request for permission to proceed with an alteration.
- B. The vegetation management plan shall identify the proposed clearing limits for the project and any areas where vegetation in a sensitive area or its buffer is proposed to be disturbed.
- C. Where clearing includes cutting any merchantable stand of timber, as defined in WAC 222-16-010(28), the vegetation management plan shall include a description of proposed logging practices which demonstrates how all sensitive areas will be protected in accordance with the provisions of this chapter.
- D. Clearing limits as shown on the plan shall be marked in the field in a prominent and durable manner. Proposed methods of field marking shall be reviewed and approved by King County prior to any site alteration. Field marking shall remain in place until the certificate of occupancy or final project approval is granted.
- E. The vegetation management plan may be incorporated into a temporary erosion and sediment control plan or landscaping plan where either of these plans is required by other laws or regulations.
- F. Submittal requirements for vegetation management plans shall be set forth in administrative rules. (Ord. 10870 § 462, 1993).
- 21A.24.160 Sensitive area markers and signs. A. Permanent survey stakes delineating the boundary between adjoining property and sensitive area tracts shall be set, using iron or concrete markers as established by current survey standards.
- B. The boundary between a sensitive area tract and contiguous land shall be identified with permanent signs. (Ord. 10870 § 463, 1993).
- 21A.24.170 Notice on title. A. The owner of any property containing sensitive areas or buffers on which a development proposal is submitted, except a public right-of-way or the site of a permanent public facility, shall file a notice approved by King County with the records and elections division.

The required contents and form of the notice shall be set forth in administrative rules. The notice shall inform the public of the presence of sensitive areas or buffers on the property, of the application of this chapter to the property and that limitations on actions in or affecting such sensitive areas or buffers may exist. The notice shall run with the land.

- B. The applicant shall submit proof that the notice has been filed for public record before King County shall approve any development proposal for the property or, in the case of subdivisions, short subdivisions and binding site plans, at or before recording. (Ord. 10870 § 464, 1993).
- 21A.24.180 Sensitive area tracts and designations on site plans. A. Sensitive area tracts shall be used to delineate and protect those sensitive areas and buffers listed below in development proposals for subdivisions, short subdivisions or binding site plans and shall be recorded on all documents of title of record for all affected lots:
- 1. All landslide hazard areas and buffers which are one acre or greater in size;
- 2. All steep slope hazard areas and buffers which are one acre or greater in size;
 - 3. All wetlands and buffers; and
 - 4. All streams and buffers.
- B. Any required sensitive area tract shall be held in an undivided interest by each owner of a building lot within the development with this ownership interest passing with the ownership of the lot or shall be held by an incorporated homeowner's association or other legal entity which as sures the ownership, maintenance and protection of the tract.
- C. Site plans submitted as part of development proposals for building permits, master plan developments and clearing and grading permits shall include and delineate all flood hazard areas, [if they have been mapped by FEMA or King County or if a special study is required] landslide, volcanic, coal mine and steep slope hazard areas, streams and wetlands, buffers and building setbacks. If only a part of the development site has been mapped pursuant to K.C.C. 21A.24.120 C., the part of the site which has not been mapped shall be clearly identified and labeled on the site plans. The site plans shall be attached to the notice on title required by K.C.C. 21A.24.170. (Ord. 10870 § 465, 1993).
- 21A.24.190 Alteration. Any human activity which results or is likely to result in an impact upon the existing condition of a sensitive area is an alteration which is subject to specific limitations as specified for each sensitive area. Alterations include, but are not limited to, grading, filling, dredging, draining, channelizing, applying herbicides or pesticides or any hazardous substance, discharging pollutants except stormwater, grazing domestic animals, paving, constructing, applying gravel, modifying for surface water management purposes, cutting, pruning, topping, trimming, relocating or removing vegetation or any other human activity which results or is likely to result in an impact to existent vegetation, hydrology, wildlife or wildlife habitat. Alterations do not include walking, fishing or any other passive recreation or other similar activities. (Ord. 10870 § 466, 1993).
- 21A.24.200 Building setbacks. Unless otherwise provided, buildings and other structures shall be set back a distance of 15 feet from the edges of all sensitive area buffers or from the edges of all sensitive areas, if no buffers are required. The following may be allowed in the building setback area:

- A. Landscaping;
- B. Uncovered decks;
- C. Building overhangs if such overhangs do not extend more than 18 inches into the setback area; and
- D. Impervious ground surfaces, such as driveways and patios, provided that such improvements may be subject to special drainage provisions specified in administrative rules adopted for the various sensitive areas. (Ord. 10870 § 467, 1993).

21A.24.210 Coal mine hazard areas: Development standards and permitted alterations.

- A. Alterations within coal mine hazard areas shall not be permitted without prior acceptance of a coal mine hazard assessment report and provided that:
- 1. Based upon recommendations contained within the report, a studied site shall be classified as one or a combination of the following:
 - a. declassified coal mine areas;
 - b. moderate coal mine hazard areas; or
 - c. severe coal mine hazard areas.
- 2. The coal mine hazard assessment report shall be prepared by a professional engineer using methodology and assumptions consistent with standards or professional engineering guidelines adopted by the department. The report may contain the following as determined by the department to be necessary for the review of the proposed use:
- a. a statement of the professional engineer's qualifications and licensing information, together with a signature and stamped seal;
 - b. a list of references utilized in preparation of the report;
- c. a description of the analytical tools and processes that have been used in the report;
- d. surface exploration data such as borings, drill holes, test pits, wells, geologic reports, and other relevant reports or site investigations that may be useful in making conclusions or recommendations about the site under investigation;
- e. a description of historical data and information used in the evaluation, together with sources. Such data and information shall include:
- (1) topographic maps at a scale and contour interval of sufficient detail to assess the site. The site boundaries and proposed site development shall be overlain with the mine plan view map, as appropriate;
- (2) copies of illustrative coal mine maps showing remnant mine conditions, if available;
 - (3) aerial photography, as appropriate;
- (4) geological data including geologic crosssections and other illustrative data as appropriate; and
- (5) available historic mine records indicating the dates of operation, the date of cessation of active mining, the number of years since abandonment, mining methods, shoring and timbering information, the strength of the overlying rock strata, the extracted seam thickness, the dip or inclination of the strata, workings and surface, the projected surface location of the seam outcrop or subcrop, the estimated depth of the seam outcrop or subcrop, if covered by glacial outwash, glacial till or other materials at depth, total coal tonnage produced, estimated coal mine by-product material produced and the estimated extraction ratio.
- f. a mine plan view map, reproduced at the same scale as the topographic map, showing the location of the mine, the extent of mining, the proposed site development, if applicable, and any remnant abandoned mine

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surface features. The following shall be included:

- (1) the layout of the underground mine;
- (2) the location of any mine entries, portals, adits, mine shafts, air shafts, timber shafts, and other significant mine features;
- (3) the location of any known sinkholes, significant surface depressions, trough subsidence features, coal mine spoil piles and other minerelated surface features;
- (4) the location of any prior site improvements that have been carried out to mitigate abandoned coal mine features; and
- (5) zones showing varying overburden-cover-to-seam-thickness ratios, when appropriate.
- g. a statement as to the relative degree of accuracy and completeness of the maps and information reviewed, especially regarding historic mine map accuracy, and reasons why such sources are considered reliable for the purpose of the hazard assessment report;
- h. a mitigation plan containing recommendations for mitigation, as appropriate, for the specific proposed alteration;
- i. recommendations for additional study, reports, development standards or architectural recommendations for subsequent and more specific proposed alterations, as appropriate;
- j. analysis and recommendations, if any, of the potential for future trough subsidence and special mitigation; and
- k. a delineation of coal mine hazard areas for the site under investigation using a map identifying the specific category (i.e., severe, moderate, or declassified) of mine hazard area. For the purposes of obtaining accurate legal descriptions, the mine hazard areas shall be surveyed and the survey map shall be drawn at a scale of not less than 1"=200'.
- 3. Giving great weight to the licensing requirements of professional engineers and standards of professional accountability and liability, the department shall review the coal mine hazard assessment report and within the time period specified in K.C.C. 20.20.050 either accept the report, recommend revisions or additions to the report or return the report to the applicant as unaccepted and detail the specific deficiencies. In the event of a disagreement, the applicant may submit the report to a mutually agreed-upon third party professional engineer who will conduct the review and issue a decision binding upon the department and applicant.
- 4. When a hazard assessment report has been accepted, the applicant shall record a notice on the title of the property as follows:

"NOTICE"

"This property is located in an area of historic coal mine activity. A coal mine hazard assessment report has been prepared to characterize the potential hazards contained on this property. The report is dated [insert date of the final report], was prepared by [insert name of professional engineer with license number] at the direction of [insert name of property owner], and reviewed by the King County department of development and environmental services [and, if necessary, include name of peer reviewing professional engineer with license number]. A review of the report is advised prior to undertaking unregulated or exempt land use activities and is required prior to undertaking regulated land use activities."

- B. Permitted alterations within a coal mine hazard area are allowed as follows, subject to other King County Code permit requirements:
 - 1. Within declassified coal mine areas all alterations are permitted.
 - 2. Within moderate coal mine hazard areas and coal mine by-product

stockpiles, all alterations are permitted subject to a mitigation plan to minimize risk of structural damage using appropriate criteria to evaluate the proposed use.

If required or recommended by the hazard assessment report, the mitigation plan to address potential trough subsidence must be prepared by a professional engineer and may be included in the coal mine hazard assessment report or may be an additional study or report, as appropriate.

- 3. Within severe coal mine hazard areas the following alterations are permitted:
- a. all grading, filling, stockpile removal, and reclamation activities undertaken pursuant to a coal mine hazard assessment report with the intent of eliminating or mitigating threats to human health, public safety, environmental restoration or protection of property, provided that:
- (1) signed and stamped plans have been prepared by a professional engineer;
- (2) as-built drawings are prepared following reclamation activities; and
- (3) the plans and as-built drawings shall be submitted to the department for inclusion with the coal mine hazard assessment report prepared for the property.
- b. private road construction and maintenance activities, provided that mitigation to eliminate or minimize significant risk of personal injury are incorporated into road construction or maintenance plans.
- c. buildings with less than four thousand square feet of floor area that contain no living quarters and that are not used as places of employment or public assembly, provided that mitigation to eliminate or minimize significant risk of personal injury are incorporated into site, building, and/or landscaping plans.
- d. additional land use activities provided that they are consistent with recommendations contained within any mitigation plan required by the hazard assessment report. (Ord. 13319 § 7, 1998: Ord. 11896 § 1, 1995: Ord. $10870 \ \S \ 468, 1993$).
- 21A.24.220 Erosion hazard areas: Development standards and permitted alterations. A. Clearing on an erosion hazard area is allowed only from April 1 to September 1, except that:
- 1. Up to 15,000 square feet may be cleared on any lot, subject to any other requirement for vegetation retention and subject to any clearing and grading permit required by K.C.C. 16.82; and
- 2. Timber harvest may be allowed pursuant to an approved forest practice permit issued by the Washington Department of Natural Resources.
- B. All development proposals on sites containing erosion hazard areas shall include a temporary erosion control plan consistent with this section and other laws and regulations prior to receiving approval. Specific requirements for such plans shall be set forth in administrative rules.
- C. All subdivisions, short subdivisions or binding site plans on sites with erosion hazard areas shall comply with the following additional requirements:
- 1. Except as provided in this section, existing vegetation shall be retained on all lots until building permits are approved for development on individual lots;
- 2. If any vegetation on the lots is damaged or removed during construction of the subdivision infrastructure, the applicant shall be required to submit a restoration plan to King County for review and approval. Following approval, the applicant shall be required to implement the plan;
 - 3. Clearing of vegetation on lots may be allowed without a separate

clearing and grading permit if King County determines that:

- a. such clearing is a necessary part of a large scale grading plan;
- b. it is not feasible to perform such grading on an individual lot basis; and
- c. drainage from the graded area will meet water quality standards to be established by administrative rules.
- D. Where King County determines that erosion from a development site poses a significant risk of damage to downstream receiving waters, based either on the size of the project, the proximity to the receiving water or the sensitivity of the receiving water, the applicant shall be required to provide regular monitoring of surface water discharge from the site. If the project does not meet water quality standards established by law or administrative rules, the county may suspend further development work on the site until such standards are met.
- E. The use of hazardous substances, pesticides and fertilizers in erosion hazard areas may be prohibited by King County. (Ord. $10870 \ \S \ 469$, 1993).

21A.24.230 Flood hazard areas: Components. A. A flood hazard area consists of the following components:

- 1. Floodplain;
- 2. Flood fringe;
- 3. Zero-rise floodway; and
- 4. Federal Emergency Management Agency ("FEMA") floodway.
- B. King County shall determine the flood hazard area after obtaining, reviewing and utilizing base flood elevations and available floodway data for a flood having a one percent chance of being equaled or exceeded in any given year, often referred to as the "100-year flood." The base flood is determined for existing conditions, unless a basin plan including projected flows under future developed conditions has been completed and adopted by King County, in which case these future flow projections shall be used. In areas where the Flood Insurance Study for King County includes detailed base flood calculations, those calculations may be used until projections of future flows are completed and approved by King County. (Ord. 10870 § 470, 1993).

21A.24.240 Flood fringe: Development standards and permitted alterations. Development proposals on sites within the flood fringe area shall meet the following requirements:

- A. Development proposals shall not reduce the effective base flood storage volume of the floodplain. Grading or other activity which would reduce the effective storage volume shall be mitigated by creating compensatory storage on the site or off the site if legal arrangements can be made to assure that the effective compensatory storage volume will be preserved over time. Grading for construction of live stock manure storage facilities to control non-point source water pollution designed to the standards of and approved by the King Conservation District is exempt from this compensatory storage requirement.
- B. All elevated construction shall be designed and certified by a professional structural engineer licensed by the State of Washington and shall be approved by King County prior to construction.
- C. Subdivisions, short subdivisions and binding site plans shall meet the following requirements:
- 1. New building lots shall contain 5,000 square feet or more of buildable land outside the zero-rise floodway, and building setback areas shall be shown on the face of the plat to restrict permanent structures to this buildable area;

- 2. All utilities and facilities such as sewer, gas, electrical and water systems shall be located and constructed consistent with subsections D., E. and H;
- 3. Base flood data and flood hazard notes shall be shown on the face of the recorded subdivision, short subdivision or binding site plan including, but not limited to, the base flood elevation, required flood protection elevations and the boundaries of the floodplain and the zero-rise floodway, if determined; and
- 4. The following notice shall also be shown on the face of the recorded subdivision, short subdivision or binding site plan for all affected lots:

"NOTICE"

"Lots and structures located within flood hazard areas may be inaccessible by emergency vehicles during flood events. Residents and property owners should take appropriate advance precautions."

- D. New residential structures and substantial improvements of existing residential structures shall meet the following requirements:
- 1. The lowest floor shall be elevated to the flood protection elevation;
- 2. Portions of a structure which are below the lowest floor area shall not be fully enclosed. The areas and rooms below the lowest floor shall be designed to automatically equalize hydrostatic and hydrodynamic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for satisfying this requirement shall meet or exceed the following requirements:
- a. a minimum of two openings on opposite walls having a total open area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided;
- $\mbox{\ensuremath{\text{b.}}}$ the bottom of all openings shall be no higher than one foot above grade; and
- c. openings may be equipped with screens, louvers or other coverings or devices if they permit the unrestricted entry and exit of floodwaters;
- 3. Materials and methods which are resistant to and minimize flood damage shall be used; and
- 4. All electrical, heating, ventilation, plumbing, air conditioning equipment and other utility and service facilities shall be flood-proofed to or elevated above the flood protection elevation.
- E. New nonresidential structures and substantial improvements of existing nonresidential structures shall meet the following requirements:
- 1. The elevation requirement for residential structures contained in subsection D.1 shall be met; or
- 2. The structure shall be flood-proofed to the flood protection elevation and shall meet the following requirements:
- a. the applicant shall provide certification by a professional civil or structural engineer licensed by the State of Washington that the flood-proofing methods are adequate to withstand the flood-depths, pressures, velocities, impacts, uplift forces and other factors associated with the base flood. After construction, the engineer shall certify that the permitted work conforms with the approved plans and specifications; and
- b. approved building permits for flood-proofed nonresidential structures shall contain a statement notifying applicants that flood insurance premiums shall be based upon rates for structures which are one foot below the flood-proofed level;

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3. Materials and methods which are resistant to and minimize flood damage shall be used; and

- 4. All electrical, heating, ventilation, plumbing, air conditioning equipment and other utility and service facilities shall be flood-proofed to or elevated above the flood protection elevation.
- F. All new construction shall be anchored to prevent flotation, collapse or lateral movement of the structure.
- G. Mobile homes and mobile home parks shall meet the following requirements:
- 1. Mobile homes shall meet all requirements for flood hazard protection for residential structures, shall be anchored and shall be installed using methods and practices which minimize flood damage; and
- 2. No permit or approval for the following shall be granted unless all mobile homes within the mobile home park meet the requirements for flood hazard protection for residential structures:
 - a. a new mobile home park;
 - b. an expansion of an existing mobile home park; or
- c. any repair or reconstruction of streets, utilities or pads in an existing mobile home park which equals or exceeds 50 percent of the value of such streets, utilities or pads.
 - H. Utilities shall meet the following requirements.
- 1. New and replacement utilities including, but not limited to, sewage treatment facilities shall be flood-proofed to or elevated above the flood protection elevation;
- 2. New on-site sewage disposal systems shall be, to the extent possible, located outside the limits of the base flood elevation. The installation of new on-site sewage disposal systems in the flood fringe may be allowed if no feasible alternative site is available;
- 3. Sewage and agricultural waste storage facilities shall be flood-proofed to the flood protection elevation;
- 4. Above-ground utility transmission lines, other than electric transmission lines, shall only be allowed for the transport of non-hazardous substances; and
- 5. Buried utility transmission lines transporting hazardous substances shall be buried at a minimum depth of four feet below the maximum depth of scour for the base flood, as predicted by a professional civil engineer licensed by the State of Washington, and shall achieve sufficient negative buoyancy so that any potential for flotation or upward migration is eliminated.
- I. Critical facilities may be allowed within the flood fringe of the floodplain, but only when no feasible alternative site is available. Critical facilities shall be evaluated through the conditional or special use permit process. Critical facilities constructed within the flood fringe shall have the lowest floor elevated to three or more feet above the base flood elevation. Flood-proofing and sealing measures shall be taken to ensure that hazardous substances will not be displaced by or released into floodwaters. Access routes elevated to or above the base flood elevation shall be provided to all critical facilities from the nearest maintained public street or roadway.
- J. Prior to approving any permit for alterations in the flood fringe, King County shall determine that all permits required by state or federal law have been obtained. (Ord. 11621 § 76, 1994: 10870 § 471, 1993).

- 21A.24.250 Zero-rise floodway: Development standards and permitted alterations. A. The requirements which apply to the flood fringe shall also apply to the zero-rise floodway. The more restrictive requirements shall apply where there is a conflict.
- B. A development proposal including, but not limited to, new or reconstructed structures shall not cause any increase in the base flood elevation unless the following requirements are met:
- 1. Amendments to the Flood Insurance Rate Map are adopted by FEMA, in accordance with 44 CFR 70, to incorporate the increase in the base flood elevation; and
- 2. Appropriate legal documents are prepared in which all property owners affected by the increased flood elevations consent to the impacts on their property. These documents shall be filed with the title of record for the affected properties.
- C. The following are presumed to produce no increase in base flood elevation and shall not require a special study to establish this fact:
- 1. New residential structures outside the FEMA floodway on lots in existence before November 27, 1990 which contain less than 5,000 square feet of buildable land outside the zero-rise floodway and which have a total building footprint of all proposed structures on the lot of less than 2,000 square feet;
- 2. Substantial improvements of existing residential structures in the zero-rise floodway, but outside the FEMA floodway, where the footprint is not increased; or
- 3. Substantial improvements of existing residential structures meeting the requirements for new residential structures in K.C.C. 21A.24.240.
- D. Post or piling construction techniques which permit water flow beneath a structure shall be used.
- E. All temporary structures or substances hazardous to public health, safety and welfare, except for hazardous household substances or consumer products containing hazardous substances, shall be removed from the zero-rise floodway during the flood season from September 30 to May 1.
- F. New residential structures or any structure accessory to a residential use shall meet the following requirements:
 - 1. The structures shall be outside the FEMA floodway; and
- 2. The structures shall be on lots in existence before November 27, 1990 which contain less than 5000 square feet of buildable land outside the zero-rise floodway.
- G. Utilities may be allowed within the zero-rise floodway if King County determines that no feasible alternative site is available, subject to the following requirements:
- 1. Installation of new on-site sewage disposal systems shall be prohibited unless a waiver is granted by the Seattle/King County department of public health; and
 - 2. Construction of sewage treatment facilities shall be prohibited.
- H. Critical facilities shall not be allowed within the zero-rise floodway except as provided in subsection J.
- I. Livestock manure storage facilities and associated non-point source water pollution facilities designed, constructed and maintained to the standards of and approved in a conservation plan by the King County Conservation District may be allowed if King County reviews and approves the location and design of the facilities.
- J. Structures and installations which are dependent upon the floodway may be located in the floodway if the development proposal is approved by all agencies with jurisdiction. Such structures include, but are not limited to:
- 1. Dams or diversions for water supply, flood control, hydroelectric production, irrigation or fisheries enhancement;

- 2. Flood damage reduction facilities, such as levees and pumping stations;
- 3. Stream bank stabilization structures where no feasible alternative exists for protecting public or private property;
- 4. Storm water conveyance facilities subject to the development standards for streams and wetlands and the Surface Water Design Manual;
 - 5. Boat launches and related recreation structures;
 - 6. Bridge piers and abutments; and
- 7. Other fisheries enhancement or stream restoration projects. (Ord. 10870 § 472, 1993).

21A.24.260 FEMA floodway: Development standards and permitted alterations.

- A. The requirements which apply to the zero-rise floodway shall also apply to the FEMA floodway. The more restrictive requirements shall apply where there is a conflict.
- B. A development proposal including, but not limited to, new or reconstructed structures shall not cause any increase in the base flood elevation.
- C. New residential or nonresidential structures are prohibited within the FEMA floodway.
- D. Substantial improvements of existing residential structures in the FEMA floodway, meeting the requirements of WAC 173-158-070, as amended, are presumed to produce no increase in base flood elevation and shall not require a special study to establish this fact. (Ord. $10870 \ \S 473$, 1993).

21A.24.270 Flood hazard areas: Certification by engineer or surveyor.

- A. For all new structures or substantial improvements in a flood hazard area, the applicant shall provide certification by a professional civil engineer or land surveyor licensed by the State of Washington of:
- 1. The actual as-built elevation of the lowest floor, including basement; and
- 2. The actual as-built elevation to which the structure is flood-proofed, if applicable.
- B. The engineer or surveyor shall indicate if the structure has a basement.
- C. King County shall maintain the certifications required by this section for public inspection. (Ord. 10870 § 474, 1993).
- 21A.24.275 Channel relocation and stream meander areas. No structure shall be allowed which would be at risk due to channel relocation or stream meander until the promulgation of a public rule. (Ord. 11621 § 75, 1994).
- 21A.24.280 Landslide hazard areas: Development standards and permitted alterations. A development proposal on a site containing a landslide hazard area shall meet the following requirements:
- A. A minimum buffer of 50 feet shall be established from all edges of the landslide hazard area. The buffer shall be extended as required to mitigate a steep slope or erosion hazard or as otherwise necessary to protect the public health, safety and welfare. For landslide hazard areas that are also steep slopes over 200 feet in height, the building setback shall be 50 feet from the buffer. The building setback may be reduced to a minimum of 15 feet from the buffer if, based on a special study, King County determines that the reduction will adequately protect the proposed development and the sensitive area. For single family residential building permits only, King County may waive the special study requirement and authorize building setback reductions, pursuant to K.C.C. 21A.24.075 or if King County determines that

the reduction will adequately protect the proposed development and the sensitive area;

- B. Unless otherwise provided herein or as part of an approved alteration, removal of any vegetation from a landslide hazard area or buffer shall be prohibited, except for limited removal of vegetation necessary for surveying purposes and for the removal of hazard trees determined to be unsafe according to tree selection rules promulgated pursuant to this chapter. Notice to King County shall be provided prior to any vegetation removal permitted by this subsection;
- C. Vegetation on slopes within a landslide hazard area or buffer which has been damaged by human activity or infested by noxious weeds may be replaced with vegetation native to King County pursuant to an enhancement plan approved by King County. The use of hazardous substances, pesticides and fertilizers in landslide hazard areas and their buffers may be prohibited by King County; and
- D. Alterations to landslide hazard areas and buffers may be allowed only as follows:
- 1. A landslide hazard area located on a slope 40% or steeper may be altered only if the alteration meets the standards and limitations set forth for steep slope hazard areas in K.C.C. 21A.24.310;
- 2. A landslide hazard area located on a slope less than 40% may be altered only if the alteration meets the following requirements:
- a. the development proposal will not decrease slope stability on contiguous properties; and $% \left(1\right) =\left(1\right) \left(1\right) \left($
- b. mitigation based on the best available engineering and geological practices is implemented which either eliminates or minimizes the risk of damage, death or injury resulting from landslides; and
- 3. Neither buffers nor a sensitive area tract shall be required if the alteration meets the standards of subsection D.2. (Ord. $12822 \S 9$, 1997: Ord. $10870 \S 475$, 1993).
- 21A.24.290 Seismic hazard areas: Development standards and permitted alterations. A development proposal on a site containing a seismic hazard area shall meet the following requirements:
- A. Unless exempt, development proposals shall be subject to review standards based on two occupancy types: critical facilities and other structures. The review standards for critical facilities shall be based on larger earthquake reoccurrence intervals. The review standards for both occupancy types shall be set forth in administrative rules;
 - B. Alterations to seismic hazard areas may be allowed only as follows:
- 1. The evaluation of site-specific subsurface conditions shows that the proposed development site is not located in a seismic hazard area; or
- 2. Mitigation based on the best available engineering and geological practices is implemented which either eliminates or minimizes the risk of damage, death or injury resulting from seismically induced settlement or soil liquefaction; and
- 3. Mobile homes may be placed in seismic hazard areas without performing special studies to address the seismic hazard. Such mobile homes may be subject to special support and tie-down requirements. These requirements shall be set forth in administrative rules.
- C. Buildings with less than 2500 square feet of floor area or roof area (whichever is greater) that contain no living quarters and that are not used as places of employment or public assembly exempt from the provisions of this section. (Ord. $10870 \ \S \ 476$, 1993).

- 21A.24.300 Volcanic hazard areas: Development standards and permitted alterations. A development proposal on a site containing a volcanic hazard area shall meet the following requirements:
- A. Within volcanic hazard areas located along the White River upstream from Mud Mountain Dam:
 - 1. No critical facilities shall be constructed or located;
- 2. No new apartments, townhouses or commercial structures shall be constructed or located;
- 3. All new lots created by subdivision, short subdivision or binding site plan shall require building areas outside of the volcanic hazard area which shall be designated with building setback areas; and
- 4. New single detached residential construction on existing lots may be allowed if the applicant records with the records and elections division the following notice on all title documents:

"NOTICE"

"The structures on this property are located in an area which may be inundated by mudflows originating on Mount Rainier. For further information regarding this hazard, please contact King County";

- B. Within volcanic hazard areas located along the White River downstream from Mud Mountain Dam and Green and Duwamish Rivers: critical facilities shall be evaluated for risk of inundation or flooding resulting from mudflows originating on Mount Rainier. These structures shall be designed to withstand, without damage, the effects of mudflows equal in magnitude to the prehistoric Electron Mudflow; and
- C. This section shall not become effective until King County has completed the required modeling and mapping of volcanic hazard areas. (Ord. $10870 \ \S \ 477, 1993$).
- 21A.24.310 Steep slope hazard areas: Development standards and permitted alterations. A development proposal on a site containing a steep slope hazard area shall meet the following requirements:
- A. A minimum buffer of fifty feet shall be established from the top, toe and along all sides of any slope forty percent or steeper. The buffer shall be extended as required to mitigate a landslide or erosion hazard or as otherwise necessary to protect the public health, safety and welfare. The buffer may be reduced to a minimum of ten feet if, based on a special study, King County determines that the reduction will adequately protect the proposed development and the sensitive area. The buffer may only be reduced to twenty-five feet in the case of erosion hazard areas. For single family residential building permits only, King County may waive the special study requirement and authorize buffer reductions, pursuant to K.C.C. 21A.24.075 or if King County determines that the reduction will adequately protect the proposed development and the sensitive area;
- B. Unless otherwise provided herein or as part of an approved alteration, removal of any vegetation from a steep slope hazard area or buffer shall be prohibited, except for limited removal of vegetation necessary for surveying purposes and for the removal of hazard trees determined to be unsafe according to tree selection rules promulgated pursuant to this chapter. Notice to King County shall be provided prior to any vegetation removal permitted by this subsection;

- C. Vegetation on steep slopes within steep slope hazard areas or their buffers which has been damaged by human activity or infested by noxious weeds may be replaced with vegetation native to King County pursuant to a vegetation management plan approved by King County. The use of hazardous substances, pesticides and fertilizers in steep slope hazard areas and their buffers may be prohibited by King County;
- D. Alterations to steep slope hazard areas and buffers may be allowed only as follows:
- 1. Approved surface water conveyances, as specified in the Surface Water Design Manual, may be allowed on steep slopes if they are installed in a manner to minimize disturbance to the slope and vegetation;
- 2. Public and private trails may be allowed on steep slopes as approved by the county. Under no circumstances shall trails be constructed of concrete, asphalt or other impervious surfaces which will contribute to surface water run-off, unless such construction is necessary for soil stabilization or soil erosion prevention or unless the trail system is specifically designed and intended to be accessible to handicapped persons. Additional requirements for trail construction may be set forth in administrative rules;
- 3. Utility corridors may be allowed on steep slopes if a special study shows that such alteration will not subject the area to the risk of landslide or erosion;
- 4. Limited trimming and pruning of vegetation may be allowed on steep slopes pursuant to an approved vegetation management plan for the creation and maintenance of views if the soils are not disturbed and the activity is subject to administrative rules;
 - 5. Approved mining and quarrying activities may be allowed; and
- 6. Stabilization of sites where erosion or landsliding threaten public or private structures, utilities, roads, driveways or trails, or where erosion and landsliding threatens any lake, stream, wetland or shoreline. Stabilization work shall be performed in a manner which causes the least possible disturbance to the slope and its vegetative cover; and
 - 7. Reconstruction, remodeling or replacement of existing structures.

Reconstruction, remodeling, or replacement of an existing structure upon another portion of an existing impervious surface which was established pursuant to King County laws and regulations may be allowed provided:

- a. if within the buffer, the structure is located no closer to the steep slope than the existing structure,
- b. the existing impervious surface within the buffer or steep slope is not expanded as a result of the reconstruction or replacement.
- E. Point discharges from surface water facilities onto or upstream from steep slope hazard areas that are also erosion hazard areas shall be prohibited except as follows:
- 1. Conveyed via continuous storm pipe downslope to a point where there are no erosion hazard areas downstream from the discharge;
- 2. Discharged at flow durations matching predeveloped conditions, with adequate energy dissipation, into existing channels that previously conveyed stormwater runoff in the predevelopment state; or
- 3. Dispersed discharge upslope of the steep slope onto a low-gradient undisturbed buffer demonstrated to be adequate to infiltrate all surface and stormwater runoff.
 - F. The following are exempt from the provisions of this section:

- 1. Slopes which are forty percent or steeper with a vertical elevation change of up to twenty feet if no adverse impact will result from the exemption based on King County's review of and concurrence with a soils report prepared by a geologist or geotechnical engineer; and
- 2. The approved regrading of any slope which was created through previous legal grading activities. Any slope which remains forty percent or steeper following site development shall be subject to all requirements for steep slopes. (Ord. 13190 \S 21, 1998: Ord. 11621 \S 77, 1994: Ord. 11273 \S 5, 1994: Ord. 10870 \S 478, 1993).
- 21A.24.320 Wetlands: Development standards. A development proposal on a site containing a wetland shall meet the following requirements:
- A. The following minimum buffers shall be established from the wetland edge:
 - 1. A class 1 wetland shall have a 100-foot buffer;
 - 2. A class 2 wetland shall have a 50-foot buffer;
 - 3. A class 3 wetland shall have a 25-foot buffer;
- 4. Any wetland restored, relocated, replaced or enhanced because of a wetland alteration shall have the minimum buffer required for the highest wetland class involved; and
- 5. Any wetland within 25 feet of the toe of a slope 30% or steeper, but less than 40%, shall have:
- a. the minimum buffer required for the wetland class involved or a 25-foot buffer beyond the top of the slope, whichever is greater, if the horizontal length of the slope including small benches and terraces is within the buffer for that wetland class; or
- b. a 25-foot buffer beyond the minimum buffer required for the wetland class involved if the horizontal length of the slope including small benches and terraces extends beyond the buffer for that wetland class;
- B. Buffer width averaging may be allowed by King County if it will provide additional protection to wetlands or enhance their functions, as long as the total area contained in the buffer on the development proposal site does not decrease;
- C. Increased buffer widths shall be required by King County when necessary to protect wetlands. Provisions for additional buffer widths shall be contained in administrative rules promulgated pursuant to this chapter including, but not limited to, provisions pertaining to critical drainage areas, location of hazardous substances, critical fish and wildlife habitat, landslide or erosion hazard areas contiguous to wetlands, groundwater recharge and discharge and the location of trail or utility corridors;
- D. The use of hazardous substances, pesticides and fertilizers in the wetland and its buffer may be prohibited by King County;
- E. Unless otherwise provided, the following restrictions shall apply to all development proposals which include the introduction of livestock:
 - 1. To prevent damage to class 1 and 2 wetlands:
- a. a plan to protect and enhance the wetland's water quality shall be implemented pursuant to 21A.30; or
- b. fencing located not closer than the buffer edge shall be required; and
- 2. Standards pertaining to access to streams for watering purposes, stream crossing requirements and use of natural barriers and vegetative buffering in lieu of fencing shall be included in administrative rules promulgated pursuant to this chapter;
- F. The livestock restrictions contained in subsection E. shall not apply to wetlands defined as grazed wet meadows, regardless of their classification. (Ord. $10870 \ \S \ 479$, 1993).

- 21A.24.330 Wetlands: Permitted alterations. Alterations to wetlands and buffers may be allowed pursuant to K.C.C. 21A.24.075 or as follows:
- A. Alterations may be permitted if King County determines, based upon its review of special studies completed by qualified professionals, that:
- 1. The wetland does not serve any of the valuable functions of wetlands identified in K.C.C. 21A.06.1415 including, but not limited to, biologic and hydrologic functions; or
 - 2. The proposed development will;
- a. protect, restore or enhance the wildlife habitat, natural drainage or other valuable functions of the wetland resulting in a net improvement to the functions of the wetland system;
- b. develop a plan for its design, implementation, maintenance and monitoring prepared by a civil engineer and a qualified biologist;
- c. perform the restoration or enhancement under the direction of a qualified biologist; and
 - d. will otherwise be consistent with the purposes of this chapter.
- B. To establish the conditions in subsection A., detailed studies may be required as part of the special study on habitat value, hydrology, erosion and deposition and/or water quality. Such detailed studies shall include specific recommendations for mitigation which may be required as a condition of any development proposal approval. The recommendations may include, but are not limited to, construction techniques or design, drainage or density specifications;
- C. If a wetland is in a flood hazard area, the applicant shall notify affected communities and native tribes of proposed alterations prior to any alteration and submit evidence of such notification to the Federal Insurance Administration;
- D. There shall be no introduction of any plant or wildlife which is not indigenous to King County into any wetland or buffer unless authorized by a state or federal permit or approval;
 - E. Utilities may be allowed in wetland buffers if:
- 1. King County determines that no practical alternative location is available; and
- 2. The utility corridor meets any additional requirements set forth in administrative rules including, but not limited to, requirements for installation, replacement of vegetation and maintenance;
 - F. Sewer utility corridors may be allowed in wetland buffers only if:
- 1. The applicant demonstrates that sewer lines are necessary for gravity flow;
- 2. The corridor is not located in a wetland or buffer used by species listed as endangered or threatened by the state or federal government or containing critical or outstanding actual habitat for those species or heron rookeries or raptor nesting trees;
- 3. The corridor alignment including, but not limited to, any allowed maintenance roads follows a path beyond a distance equal to seventy-five of the buffer width from the wetland edge;
- 4. Corridor construction and maintenance protects the wetland and buffer and is aligned to avoid cutting trees greater than twelve inches in diameter at breast height, when possible, and pesticides, herbicides and other hazardous substances are not used;
- 5. An additional, contiguous and undisturbed buffer, equal in width to the proposed corridor including any allowed maintenance roads, is provided to protect the wetland;

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- 6. The corridor is revegetated with appropriate vegetation native to King County at pre-construction densities or greater immediately upon completion of construction or as soon thereafter as possible, and the sewer utility ensures that such vegetation survives;
- 7. Any additional corridor access for maintenance is provided, to the extent possible, at specific points rather than by a parallel road; and
- 8. The width of any necessary parallel road providing access for maintenance is as small as possible, but not greater than fifteen feet, the road is maintained without the use of herbicides, pesticides or other hazardous substances and the location of the road is contiguous to the utility corridor on the side away from the wetland;
- G. Joint use of an approved sewer utility corridor by other utilities may be allowed.
- H. The following surface water management activities and facilities may be allowed in wetlands or their buffers only as follows:
- 1. Surface water discharge to a wetland from a flow control or water quality treatment facility, sediment pond or other surface water management activity or facility may be allowed if the discharge does not increase the rate of flow, change the plant composition in a forested wetland or decrease the water quality of the wetland;
- 2. A class 1, 2 or 3 wetland or buffer may be used for a regional retention/detention facility if:
- a. a public agency and utility exception is granted pursuant to $K.C.C.\ 21A.24.070;$
 - b. all requirements of the Surface Water Design Manual are met;
- c. the use will not alter the rating or the factors used in rating the wetland;
- d. the proposal is in compliance with the latest adopted findings of the Puget Sound Wetlands Research Project; and
 - e. there are no significant adverse impacts to the wetland;
- 3. Isolated class 3 wetlands and buffers which are grazed wet meadows may be used as a flow control facility if:
- a. presettlement pond or water quality treatment is required prior to flow into the wetland, and
- b. they are not part of, or immediately adjacent to, an LSRA, RSRA or a designated wildlife habitat corridor and all requirements of the Surface Water Design Manual are met; and
- 4. Use of a wetland buffer for a surface water management activity or facility, other than a flow control or water quality treatment facility, such as an energy dissipater and associated pipes, may be allowed only if the applicant demonstrates, to the satisfaction of King County, that:
 - a. no practicable alternative exists; and
- b. the functions of the buffer or the wetland are not adversely affected;
- I. Public and private trails may be allowed in wetland buffers only upon adoption of administrative rules consistent with the following:
- 1. The trail surface shall not be made of impervious materials, except that public multi-purpose trails such as the Burke-Gilman Trail may be made of impervious materials if they meet all other requirements including water quality; and
- 2. Buffers shall be expanded, where possible, equal to the width of the trail corridor including disturbed areas;
- J. A dock, pier, moorage, float or launch facility may be allowed, subject to the provisions of K.C.C. Title 25, if:

- 1. The existing and zoned density around the wetland is three dwelling units per acre or more;
- 2. At least seventy-five percent of the lots around the wetland have been built upon and no significant buffer or wetland vegetation remains on these lots; and
 - 3. Open water is a significant component of the wetland;
 - K. Alterations to isolated wetlands may be allowed only as follows:
- 1. On sites of less than twenty acres in size, one isolated wetland may be altered by relocating its functions into a new wetland on the site pursuant to an approved mitigation plan;
- 2. On sites twenty acres or greater in size, up to three isolated wetlands may be altered by combining their functions into one or more replacement wetlands on the site pursuant to an approved mitigation plan; and
- 3. Whenever an isolated wetland is altered pursuant to this subsection, the replacement wetland shall include enhancement for wildlife habitat;
- L. One additional agricultural building or associated residence may be allowed within the wetland buffer on a grazed wet meadow if all hydrologic storage is replaced on the site;
- M. Subject to a clearing and grading permit issued pursuant to K.C.C. chapter 16.82, the cutting of up to one cord of firewood may be permitted in buffers of five acres or larger in any year if the overall function of the buffer is not adversely affected. Removal of brush may also be permitted for the purpose of enhancing tree growth if the area of removal is limited to the diameter of the tree canopy at the time of planting; and
 - N. Wetland road crossings may be allowed if:
 - 1. King County determines that no alternative access is practical;
- 2. All crossings minimize impact to the wetland and provide mitigation for unavoidable impacts through restoration, enhancement or replacement of disturbed areas;
 - 3. Crossings do not change the overall wetland hydrology;
- 4. Crossings do not diminish the flood storage capacity of the wetland; and
 - 5. All crossings are constructed during summer low water periods.
- O. Reconstruction, remodeling, or replacement of existing structures. Reconstruction, remodeling, or replacement of an existing structure upon another portion of an existing impervious surface which was established pursuant to King County laws and regulations may be allowed provided:
- 1. If within the buffer, the structure is located no closer to the wetland than the existing structure,
- 2. The existing impervious surface within the buffer or wetland is not expanded as a result of the reconstruction or replacement.
- P. Wetland enhancement or restoration not associated with any other development proposal may be allowed if accomplished according to a plan for its design, implementation, maintenance and monitoring prepared by a civil engineer and a qualified biologist and carried out under the direction of a qualified biologist. Restoration or enhancement must result in a net improvement to the functions of the wetland system; and
- Q. A minor wetland restoration project for fish habitat enhancement may be allowed if:
- 1. The restoration is sponsored by a public agency with a mandate to do such work;

- The restoration is not associated with mitigation of a specific development proposal;
- 3. The restoration is limited to revegetation of wetlands and their buffers and other specific fish and wildlife habitat improvements that result in a net improvement to the functions of the wetland system;
- 4. The restoration only involves the use of hand labor and light equipment, or the use of helicopters and cranes which deliver supplies to the project site provided that they have no contact with sensitive areas or their buffers; and
- 5. The restoration is performed under the direction of a qualified biologist. (Ord. 13190 § 22, 1998: Ord. 11621 § 78, 1994: Ord. 11273 § 6, 1994: Ord. 10870 § 480, 1993).
- 21A.24.340 Wetlands: Mitigation requirements. A. Restoration shall be required when a wetland or its buffer is altered in violation of law or without any specific permission or approval by King County. The following minimum requirements shall be met for the restoration of a wetland:
- 1. The original wetland configuration shall be replicated including its depth, width, length and gradient at the original location;
 - 2. The original soil type and configuration shall be replicated;
- 3. The wetland edge and buffer configuration shall be restored to its original condition;
- The wetland, edge and buffer shall be replanted with vegetation native to King County which replicates the original vegetation in species, sizes and densities; and
- The original wetland functions shall be restored including, but not limited to, hydrologic and biologic functions.
- B. The requirements in subsection A. may be modified if the applicant demonstrates that greater wetland functions can otherwise be obtained.
- C. Replacement shall be required when a buffer is altered pursuant to an approved development proposal or a wetland is used for a regional flow control facility or other approved use. The requirements for the restoration of wetlands shall be met by replacement wetlands.
- D. Enhancement may be allowed when a wetland or buffer will be altered pursuant to a development proposal, but the wetland's biologic and/or hydrologic functions will be improved. Minimum requirements for enhancement shall be established in administrative rules.
- E. All alterations of wetlands shall be replaced or enhanced on the site or within the same drainage basin using the following formulas: class 1 and 2 wetlands on a 2:1 basis and class 3 wetlands on a 1:1 basis with equivalent or greater biologic functions including, but not limited to, habitat functions and with equivalent hydrologic functions including, but not limited to, storage capacity.
- F. Replacement or enhancement off the site may be allowed if the applicant demonstrates to the satisfaction of King County that the off-site location is in the same drainage sub-basin as the original wetland and that greater biologic and hydrologic functions will be achieved. The formulas in subsection E. shall apply to replacement and enhancement off the site.
- G. Surface water management or flood control alterations including, but not limited to, wetponds shall not constitute replacement or enhancement unless other functions are simultaneously improved.

H. Mitigation sites should be located to alleviate wildlife habitat fragmentation. (Ord. 13190 § 23, 1998: Ord. 11621 § 79, 1994: Ord. 10870 § 481, 1993).

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- 21A.24.345 Wetlands: Mitigation banking. King County may consider and approve replacement or enhancement of unavoidable adverse impacts to wetlands caused by the development activities through an approved wetland mitigation bank. Compensatory mitigation in advance of authorized impacts must be provided through an approved mitigation bank. Criteria governing the creation and use of a mitigation bank shall be established in administrative rules. A pilot project or projects, complete with evaluation should be initiated which would test the viability of the mitigation bank concept prior to its full implementation. (Ord. 11621 § 72, 1994).
- 21A.24.350 Wetlands: Limited exemption. Isolated wetlands less than 1000 square feet may be exempted from the provisions of K.C.C. 21A.24.320 21A.24.340 and may be altered by filling or dredging if King County determines that the cumulative impacts do not unduly counteract the purposes of this chapter and are mitigated pursuant to an approved mitigation plan. (Ord. 10870 § 482, 1993).
- 21A.24.360 Streams: Development standards. A development proposal on a site containing a stream shall meet the following requirements:
- A. The following minimum buffers shall be established from the ordinary high water mark or from the top of the bank if the ordinary high water mark cannot be identified:
 - 1. A class 1 stream shall have a 100-foot buffer;
 - 2. A class 2 stream used by salmonids shall have a 100-foot buffer;
 - 3. A class 2 stream shall have a 50-foot buffer;
 - 4. A class 3 stream shall have a 25-foot buffer;
- 5. In the Bear Creek Basin, class 1 and 2 streams used by salmonids, shall have a 150-foot buffer;
- 6. In the Bear Creek Basin, a class 2 stream not used by salmonids, shall have a 100-foot buffer;
- 7. In the Bear Creek Basin, a class 3 stream shall have a 50-foot buffer except in designated regionally significant resource areas where a class 3 stream shall have a 100-foot buffer;
- 8. Any stream restored, relocated, replaced or enhanced because of a stream alteration shall have the minimum buffer required for the stream class involved;
- 9. Any stream with an ordinary high water mark within 25 feet of the toe of a slope 30% or steeper, but less than 40%, shall have:
- a. the minimum buffer required for the stream class involved or a 25-foot buffer beyond the top of the slope, whichever is greater, if the horizontal length of the slope including small benches and terraces is within the buffer for that stream class; or
- b. a 25-foot buffer beyond the minimum buffer required for the stream class involved if the horizontal length of the slope including small benches and terraces extends beyond the buffer for that stream class; and
- 10. Any stream adjoined by a riparian wetland or other contiguous sensitive area shall have the buffer required for the stream class involved or the buffer which applies to the wetland or other sensitive area, whichever is greater;

- B. Buffer width averaging may be allowed by King County if it will provide additional natural resource protection, as long as the total area contained in the buffer on the development proposal site does not decrease;
- C. Increased buffer widths shall be required by King County when necessary to protect streams. Provisions for additional buffer widths shall be contained in administrative rules promulgated pursuant to this chapter

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including, but not limited to, critical drainage areas, location of hazard ous substances, critical fish and wildlife habitat, landslide or erosion hazard areas contiguous to streams, groundwater recharge and discharge and the location of trail or utility corridors;

- D. The use of hazardous substances, pesticides and fertilizers in the stream corridor and its buffer may be prohibited by King County; and
- E. The livestock restrictions in K.C.C. 21A.24.320 shall also apply to class 1 and 2 streams and their buffers except that barrier fencing shall not be required in the floodplain of the Snoqualmie River. (Ord. 12015 \S 4, 1995: Ord. 10870 \S 483, 1993).
- 21A.24.370 Streams: Permitted alterations. Alterations to streams and buffers may be allowed pursuant to K.C.C. 21A.24.075 or as follows:
 - A. Alterations may only be permitted if based upon a special study;
- B. The applicant shall notify affected communities and native tribes of proposed alterations prior to any alteration if a stream is in a flood hazard area and shall submit evidence of such notification to the Federal Insurance Administration;
- C. There shall be no introduction of any plant or wildlife which is not indigenous to King County into any stream or buffer unless authorized by a state or federal permit or approval;
 - D. Utilities may be allowed in stream buffers if:
 - 1. No practical alternative location is available;
- 2. The utility corridor meets any additional requirements set forth in administrative rules including, but not limited to, requirements for installation, replacement of vegetation and maintenance;
- 3. The requirements for sewer utility corridors in K.C.C. 21A.24.330 shall also apply to streams; and
- 4. Joint use of an approved sewer utility corridor by other utilities may be allowed;
- E. The following surface water management activities and facilitates may be allowed in stream buffers as follows:
- 1. Surface water discharge to a stream from a flow control or water quality treatment facility, sediment pond or other surface water management activity or facility may be allowed if the discharge is in compliance with the Surface Water Design Manual;
- 2. A class 2 stream or buffer may be used for a regional stormwater management facility if:
- a. a public agency and utility exception is granted pursuant to $K.C.C.\ 21A.24.070;$
 - b. all requirements of the Surface Water Design Manual are met;
- c. the use will not alter the rating or the factors used in rating the stream;
 - d. there are no significant adverse impacts to the stream; and
- 3. A class 3 stream or buffer may be used as a regional stormwater management facility if the alteration will have no lasting adverse impact on any stream and all requirements of the Surface Water Design Manual are met;

- F. Except as provided in subsection G, public and private trails may be allowed in stream buffers only upon adoption of administrative rules consistent with the following:
- 1. The trail surface shall not be made of impervious materials, except that public multi-purpose trails such as the Burke-Gilman Trail may be made of impervious materials if they meet all other requirements including water quality; and

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- 2. Buffers shall be expanded, where possible, equal to the width of the trail corridor including disturbed areas;
- G. Stream crossings may be allowed and may encroach on the otherwise required stream buffer if:
- 1. All crossings use bridges or other construction techniques which do not disturb the stream bed or bank, except that bottomless culverts or other appropriate methods demonstrated to provide fisheries protection may be used for class 2 or 3 streams if the applicant demonstrates that such methods and their implementation will pose no harm to the stream or inhibit migration of fish;
- 2. All crossing are constructed during the summer low flow and are timed to avoid stream disturbance during periods when use is critical to salmonids;
- 3. Crossings do not occur over salmonid spawning areas unless King County determines that no other possible crossing site exists;
- 4. Bridge piers or abutments are not placed within the FEMA floodway or the ordinary high water mark;
- 5. Crossings do not diminish the flood-carrying capacity of the stream;
- 6. Underground utility crossings are laterally drilled and located at a depth of four feet below the maximum depth of scour for the base flood predicted by a civil engineer licensed by the state of Washington. Temporary bore pits to perform such crossings may be permitted within the stream buffer established in K.C.C. 21A.24.360. Crossing of Class 3 streams when dry may be made with open cuts; and
- 7. Crossings are minimized and serve multiple purposes and properties whenever possible;
 - H. Stream relocations may be allowed only for:
- 1. Class 2 streams as part of a public road project for which a public agency and utility exception is granted pursuant to K.C.C. 21A.24.050; and
- 2. Class 3 streams for the purpose of enhancing resources in the stream if:
 - a. appropriate floodplain protection measures are used; and
- b. the relocation occurs on the site, except that relocation off the site may be allowed if the applicant demonstrates that any on-site relocation is impracticable, the applicant provides all necessary easements and waivers from affected property owners and the off-site location is in the same drainage sub-basin as the original stream;
- I. For any relocation allowed by this section, the applicant shall demonstrate, based on information provided by a civil engineer and a qualified biologist, that:
- 1. The equivalent base flood storage volume and function will be maintained;
 - 2. There will be no adverse impact to local groundwater;
 - 3. There will be no increase in velocity;

- 4. There will be no interbasin transfer of water;
- 5. There will be no increase in sediment load;
- 6. Requirements set out in the mitigation plan are met;
- 7. The relocation conforms to other applicable laws; and
- 8. All work will be carried out under the direct supervision of a qualified biologist;
 - J. A stream channel may be stabilized if:
- 1. Movement of the stream channel threatens existing residential or commercial structures, public facilities or improvements, unique natural resources or the only existing access to property; and

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21A.24.370 - 21A.24.380

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- 2. The stabilization is done in compliance with the requirements of K.C.C. 21A.24.230 through 21A.24.270 and administrative rules promulgated pursuant to this chapter;
- K. Stream enhancement not associated with any other development proposal may be allowed if accomplished according to a plan for its design, implementation, maintenance and monitoring prepared by a civil engineer and a qualified biologist and carried out under the direction of a qualified biologist;
- L. A minor stream restoration project for fish habitat enhancement may be allowed if:
- 1. The restoration is sponsored by a public agency with a mandate to do such work;
- 2. The restoration is unassociated with mitigation of a specific development proposal;
- 3. The restoration is limited to placement of rock wiers, log controls, spawning gravel and other specific salmonid habitat improvements;
- 4. The restoration only involves the use of hand labor and light equipment; or the use of helicopters and cranes which deliver supplies to the project site provided that they have no contact with sensitive areas or their buffers; and
- 5. The restoration is performed under the direction of a qualified biologist;
- M. Roadside and agricultural drainage ditches which carry streams with salmonids may be maintained through the use of best management practices developed in consultation with relevant county, state and federal agencies. These practices shall be adopted as administrative rules;
- N. Subject to a clearing and grading permit issued pursuant to K.C.C. 16.82, the cutting of up to one cord of firewood may be permitted in buffers of five acres or larger in any year if the overall function of the buffer is not adversely affected. Removal of brush may also be permitted for the purpose of enhancing tree growth if the area of removal is limited to the diameter of the tree canopy at the time of planting.
- O. Reconstruction, remodeling, or replacement of existing structures. Reconstruction, remodeling, or replacement of an existing structure upon another portion of an existing impervious surface which was established pursuant to King County laws and regulations may be allowed provided:
- 1. If within the buffer, the structure is located no closer to the stream than the existing structure,
- 2. The existing impervious surface within the buffer or stream is not expanded as a result of the reconstruction or replacement. (Ord. 13190 § 24, 1998: Ord. 11621 § 80, 1994: Ord. 11273 § 7, 1994: Ord. 10870 § 484, 1993).
- 21A.24.380 Streams: Mitigation requirements. A. Restoration shall be required when a stream or its buffer is altered in violation of law or without

any specific permission or approval by King County. A mitigation plan for the restoration shall demonstrate that:

- 1. The stream has been degraded and will not be further degraded by the restoration activity;
- 2. The restoration will reliably and demonstrably improve the water quality and fish and wildlife habitat of the stream;
- 3. The restoration will have no lasting significant adverse impact on any stream functions; and
 - 4. The restoration will assist in stabilizing the stream channel.
- B. The following minimum requirements shall be met for the restoration of a stream:

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- 1. All work shall be carried out under the direct supervision of a qualified biologist;
- 2. Basin analysis shall be performed to determine hydrologic conditions;
- 3. The natural channel dimensions shall be replicated including its depth, width, length and gradient at the original location, and the original horizontal alignment (meander lengths) shall be replaced;
 - 4. The bottom shall be restored with identical or similar materials;
- 5. The bank and buffer configuration shall be restored to its original condition;
- 6. The channel, bank and buffer areas shall be replanted with vegetation native to King County which replicates the original vegetation in species, sizes and densities; and
 - 7. The original biologic functions of the stream shall be recreated.
- C. The requirements in subsection B. may be modified if the applicant demonstrates to the satisfaction of King County that a greater biologic function can otherwise be obtained;
- D. Replacement or enhancement shall be required when a stream or buffer is altered pursuant to an approved development proposal. There shall be no net loss of stream functions on a development proposal site and no impact on stream functions above or below the site due to approved alterations.
- E. The requirements which apply to the restoration of streams in subsection B. shall also apply to the relocation of streams, unless the applicant demonstrates to the satisfaction of King County that a greater biologic function can be obtained by modifying these requirements.
- F. Replacement or enhancement for approved stream alterations shall be accomplished in streams and on the site unless the applicant demonstrates to the satisfaction of King County that:
 - 1. Enhancement or replacement on the site is not possible;
- 2. The off-site location is in the same drainage sub-basin as the original stream; and
 - 3. Greater biologic and hydrologic functions will be achieved.
- G. Surface water management or flood control alterations shall not be considered enhancement unless other functions are simultaneously improved. (Ord. $10870 \ \S \ 485$, 1993).
- 21A.24.390 Sensitive areas mitigation fee Creation of fund. There is hereby created a Sensitive Areas Mitigation Fund. This fund shall be administered by the King County Office of Finance. (Ord. 10870 § 486, 1993).
- 21A.24.400 Sensitive areas mitigation fee Source of funds. All monies received from penalties resulting from the violation of rules and laws

regulating development and activities within sensitive areas shall be deposited into the fund. (Ord. $10870 \ \S 487$, 1993).

- 21A.24.410 Sensitive areas mitigation fee Use of funds. Monies from the fund shall only be used for paying the cost of enforcing and implementing sensitive area laws and rules. (Ord. 10870 § 488, 1993).
- 21A.24.420 Sensitive areas mitigation fee Investment of funds. Monies in the fund not needed for immediate expenditure shall be deposited in a separate investment fund pursuant to RCW 36.29.020. The director shall be designated as the investment fund director. (Ord. $10870 \ \S 489$, 1993).

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21A.26 ZONING

Chapter 21A.26 DEVELOPMENT STANDARDS COMMUNICATION FACILITIES

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21A.26.450 Minor communication facilities - technical evaluation.

- **21A.26.010 Purpose.** The purpose of this chapter is to establish guidelines for the siting of towers and antennas. The goals of this chapter are to:
- A. Encourage the location of towers in nonresidential areas and minimize the total number of towers throughout the community;
 - B. Strongly encourage the joint use of new and existing tower sites;
- C. Encourage users of towers and antennas to locate them, to the extent possible, in areas where the adverse impact on the community is minimal;
- D. Encourage users of towers and antennas to configure them in a way that minimizes the adverse visual impact of the towers and antennas;
- E. Enhance the ability of the providers of telecommunications services to provide such services to the community quickly, effectively and efficiently; and
- F. Limiting exposures to NIER consistent with Federal Communication Commission statutes. (Ord. 13129 § 12, 1998: Ord. 10870 § 490, 1993).
- 21A.26.020 Exemptions. The following are exempt from the provisions of this chapter and shall be permitted in all zones:
- A. Industrial processing equipment and scientific or medical equipment using frequencies regulated by the Federal Communications Commission (FCC);
- B. Machines and equipment that are designed and marketed as consumer products, such as microwave ovens and remote control toys;
 - C. The storage, shipment or display for sale of transmission equipment;
 - D. Radar systems for military and civilian communication and navigation;
- E. Hand-held, mobile, marine and portable radio transmitters and/or receivers;
- F. Two-way radio utilized for temporary or emergency services communications;
 - G. Licensed amateur (Ham) radio stations and citizen band stations;
- H. Earth station downlink using satellite dish antennas with a diameter of less than 12 feet provided that stations in excess of one dish antennas are subject to conditional use permits;
 - I. Receive-only satellite dish antennas as an accessory use;
- J. Two-way radio antennas, point-to-point microwave dishes, and cellular radio antennas which are not located on a transmission structure (lattice towers and monopoles); and
- K. Any maintenance, reconstruction, repair or replacement of a conforming or nonconforming communication facility, transmission equipment, transmission structure or transmitter building; provided, that the transmission equipment does not result in noncompliance with K.C.C. 21A.26.100 and 21A.26.130.
- L. In the event a building permit is required for any emergency maintenance, reconstruction, repair or replacement, filing of the building permit application shall not be required until 30 days after the completion of such emergency activities. In the event a building permit is required for nonemergency maintenance, reconstruction, repair or replacement, filing of the building permit application shall be required prior to the commencement of such nonemergency activities. (Ord. 10870 § 491, 1993).

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- 21A.26.030 Applicability. The standards and process requirements of this chapter supersede all other review process, setback or landscaping requirements of this title. All communication facilities which are not exempt pursuant to K.C.C. 21A.26.020 shall comply with the provisions of this chapter as follows:
- A. New communication facilities, with the exception of consolidations, shall comply with the provisions of K.C.C. 21A.26.020 through 21A.26.130 and K.C.C. 21A.26.160 through 21A.26.190; new minor communication facilities shall also comply with applicable provisions of this chapter, and, in case of conflict, the provisions of this chapter shall apply;
- B. Modified communication facilities, with the exception of consolidations, shall comply with standards as provided in K.C.C. 21A.26.020, K.C.C. 21A.26.060 through 21A.26.140, and K.C.C. 21A.26.160 through 21A.26.190, modifications to minor communication facilities shall also comply with the applicable provisions of this chapter, and, in case of conflict, the provisions of this chapter shall apply;
- C. Consolidations shall comply with standards as provided in K.C.C. 21A.26.020, K.C.C. 21A.26.060 through 21A.26.130, and K.C.C. 21A.26.150 through 21A.26.190, consolidations to minor communication facilities shall also comply with the applicable provisions of this chapter, and, in the case of conflict, the provisions of this chapter shall apply. (Ord. $13129 \ \S \ 23$, 1998: Ord. $10870 \ \S \ 492$, 1993).
- 21A.26.050 Setback requirements. Except as outlined for modifications and consolidations pursuant to K.C.C. 21A.26.140 and 21A.26.150 or when setbacks are increased to ensure compliance with NIER exposure limits, communication facilities shall comply with the following setbacks:
- A. Transmission structures, other than those for minor communication facilities, which do not exceed the height limit of the zone in which they are located, shall be set back from the property line as required for other structures by the zone in which such transmission structure is located;
- B. Transmission structures, other than those for minor communication facilities, which exceed the height limit of the zone in which they are located, shall be set back from property lines either a minimum of fifty feet or one foot for every foot in height, whichever results in the greater setback, except:
- 1. Transmission structures, other than those for minor communication facilities located in the A, F, NB, CB, RB, O or I zones shall be set back from the property line as required by the zone in which they are located; and
- 2. Transmission structures for minor communication facilities shall be set back from the property line as provided in K.C.C. 21A.26.320;
- C. When two or more communication facilities share a common boundary, the setback from such boundary shall comply with the requirements of the zone in which the facilities are located, unless easements are provided:
- 1. On the adjoining sites which limit development to communication facilities;
- 2. Of sufficient depth to provide the setbacks required in subsections A and B; and
- 3. Which provide for King County as a third party signatory to the agreement; and $\ensuremath{\mathsf{S}}$
- D. Transmitter buildings shall be subject to the setback requirements of the zone in which they are located. (Ord. 13129 § 24, 1998: Ord. 11621 § 82, 1994: 10870 § 494, 1993).

- 21A.26.060 Landscaping requirements. A communication facility site shall provide landscaping as follows:
 - A. When the facility is located in:
- 1. The NB, CB, RB, O or I zone, the base of any transmission structure or transmitter building shall be landscaped with eight feet of Type II landscaping as defined by K.C.C. 21A.16.040B, if there is no existing landscaping consistent with K.C.C. chapter 21A.16 along the lot line abutting R, UR, or RA zoned properties.
- 2. The A, F or M zone, the base of the transmission structure or transmitter building shall be landscaped with ten feet of Type III landscaping (groundcover may be excluded) as defined by K.C.C. 21A.16.040C, if the base of such transmission structure or transmitter building is within three hundred feet of any lot line abutting R, UR, or RA zoned properties.
- 3. The R, UR or RA zone, the base of any transmission structure or transmitter building shall be landscaped with ten feet of Type I landscaping as defined by $K.C.C.\ 21A.16.040A.$
- B. When a security fence is used to prevent access onto a transmission structure or transmitter building, any landscaping required pursuant to K.C.C. 21A.26.060A shall be placed outward of such security fence.
 - C. When a security fence is used:
- 1. In the NB, CB, RB, O or I zone, wood slats shall be woven into the security fence if made of chain-link material.
- 2. In the R, UR or RA zone, climbing evergreen shrubs or vines capable of growing on the fence shall supplement any landscaping required pursuant to $K.C.C.\ 21A.26.060A.$
- D. Landscaping shall be planted according to accepted practice in good soil and maintained in good condition at all times. Landscaping shall be planted as a yard improvement at or before the time of completion of the first structure or within a reasonable time thereafter, considering weather and planting conditions.
- E. Existing vegetation may be used and/or supplemented with additional vegetation to comply with the requirements of K.C.C. 21A.26.060A.
- F. The director may waive or modify the provisions for landscaping at the base of the transmission support structure and equipment buildings when:
- 1. Existing structures on the site or the screening effects of existing vegetation on the site or along the site perimeter would preclude the ability to view the base of the tower or equipment building, or
- 2. The required landscaping is accessible to grazing animals and the animals would be better protected by placement of landscape materials within any proposed fencing or by the use of alternative landscaping vegetation that would not be toxic to the animals. (Ord. 13129 \S 15, 1998: Ord. 10870 \S 495, 1993).
- 21A.26.070 Color and lighting standards. Except as specifically required by the Federal Aviation Administration ("FAA") or the FCC, transmission structures shall:
- A. Use colors such as grey, blue or green which reduce their visual impacts; provided, wooden poles do not have to be painted; and
- B. Not be illuminated, except transmitter buildings may use lighting for security reasons which is compatible with the surrounding neighborhood. (Ord. $10870 \ \S \ 496, 1993$).

- 21A.26.080 Fencing and NIER warning signs. Communication facility sites shall be:
- A. Fenced in a manner which prevents access by the public to transmission structures and/or areas of the site where NIER or shock/burn levels are exceeded. This may be modified if natural features, such as an adjoining waterway, or a topographic feature preclude access;
 - B. Signed to warn the public of areas of the site where:
 - 1. NIER standards are exceeded; and
- 2. Potential risks for shocks or burns are present. (Ord. 10870 \S 497, 1993).
- **21A.26.090 Interference.** Permit applications for communication facilities shall include:
- A. A statement describing the nature and extent of interference which may be caused by the proposed communication facility and the applicant's responsibilities under FCC rules and regulations;
- B. Unless the department determines that there will be no noticeable interference from the proposed communication facility, notification of expected interference shall be provided as specified in K.C.C. 21A.26.170; and
- C. General information concerning the causes of interference and steps which can be taken to reduce or eliminate it. (Ord. $10870 \ \S \ 498$, 1993).
- 21A.26.100 NIER exposure standards. To prevent whole-body energy absorption of .08 W/Kg or more, a communication facility, by itself or in combination with others, shall not expose the public to NIER that exceeds the electric or magnetic field strength, or the power density, for the frequency ranges and durations described as follows:

NIER Exposure Standards (1) (6)

Frequency (2)	Mean squared electric field strength (3)	Mean squared magnetic field strength (4)	Equivalent plane-wave power density (5)
0.1 to 3	80,000	0.5	20,000
3 to 30	$4,000 \times (180/f^2)$	$0.025 \times (180/f^2)$	180,000/f ²
30 to 300	800	0.005	200
300 to 1500	4,000 x (f/1500)	0.025 x (f/1500)	f/1.5
1500 to 300,000	4,000	0.025	1000

- (1) All standards refer to root mean squared measurements averaged over a six minute period;
- (2) Frequency or f is measured in megahertz (MHz);
- (3) Electric field strength is expressed in volts squared per meter squared (V^2/m^2) ;
- (4) Magnetic field strength is expressed in amperes squared per meter squared (A^2/m^2) ; and
- (5) Power density is expressed in microwatts per centimeter squared
- (6) Peak NIER levels shall not exceed the following equivalent plane-wave power densities:
 - a. Twenty times the average values in the frequencies below 300 MHz;
 - b. 4,000 uW/cm² in the frequencies between 300 Mhz to 6,000 MHz;
 - c. $(f/1.5)uW/cm^2$ in the frequencies 6,000 MHz to 30,000 MHz; and d. $20,000~uW/cm^2$ in the frequencies above 30 GHz.

(Ord. 10870 § 499, 1993).

21A.26.110 NIER measurements and calculations. NIER levels shall be measured and calculated as follows:

- A. When measuring NIER for compliance with K.C.C. 21A.26.100:
- 1. Measuring equipment used shall be generally recognized by the Environmental Protection Agency (EPA), National Council on Radiation Protection and Measurement (NCRPM), American National Standards Institute (ANSI), or National Bureau of Standards (NBS) as suitable for measuring NIER at frequencies and power levels of the proposed and existing sources of NIER;
- 2. Measurement equipment shall be calibrated as recommended by the manufacturer in accordance with methods used by the NBS and ANSI, whichever has the most current standard;

- 3. The effect of contributing individual sources of NIER within the frequency range of a broadband measuring instrument may be specified by separate measurement of these sources using a narrowband measuring instrument;
- 4. NIER measurements shall be taken when and where NIER levels are expected to be highest due to operating or environmental conditions;
- 5. NIER measurements shall be taken along the perimeter of the communication facility site and other areas on-site or off-site where the health department deems necessary to take measurements; and
- 6. NIER measurements shall be taken following spatial averaging procedures generally recognized and used by experts in the field of RF measurement or other procedures recognized by the FCC, EPA, NCRPM, ANSI, NBS;
- B. NIER calculations shall be consistent with the FCC, Office of Science and Technology (OST) bulletin 65 or other engineering practices recognized by the EPA, NCRPM, ANSI, NBS or similarly qualified organization; and
- C. Measurements and calculations shall be certified by a licensed professional engineer and shall be accompanied by an explanation of the protocol, methods, equipment, and assumptions used. (Ord. 10870 § 500, 1993).
- 21A.26.120 Measurements and monitoring. A. The department of public health shall measure or contract for measurement of NIER levels as necessary to insure that the NIER standard is not being exceeded.
- B. If the NIER level of an existing major communication facility has not been measured within 3 years of the effective date of this title, such facility shall be measured within 120 days from the effective date of this title. All major communication facilities shall be measured every third year thereafter. The measurements shall be submitted to the department of public health for review within 60 days of measurement. The department shall be reimbursed for its review of the measurements pursuant to this section.
- C. New major communication facilities shall be measured within 120 days from the commencement of the operation and every third year thereafter. The department shall be reimbursed for its review of the measurements pursuant to this section.
- D. The department of public health shall have the authority to assess fees for the cost of plan review. The fee shall be based upon the time required by staff, including overhead cost, for plan review. (Ord. $10870\ \S 501$, 1993).
- 21A.26.130 Shock and burn standard. The communication facility shall not emit radiation such that the public will be exposed to shock and burn in excess of the standards contained in ANSI C-95.1 or subsequent amendments thereto recognized by ANSI. (Ord. $10870 \ \S 502$, 1993).
- 21A.26.140 Modifications. A. Cumulative modifications of conforming or nonconforming communication facilities, transmission structures or transmission equipment which do not increase the overall height of the transmission structure or transmission equipment by more than thirty percent shall be allowed provided:
- 1. A nonconformance with respect to the transmission structure shall not be created or increased, except as otherwise provided above as to height;
- 2. Existing perimeter vegetation or landscaping shall not be reduced; and
- 3. The modification results in compliance with K.C.C. 21A.26.100 and 21A.26.130. The applicant shall provide King County a detailed certification of compliance with these provisions which has been prepared by a licensed professional engineer.
- 4. For minor communication facilities, the allowances for increased height established by this chapter shall be complied with. (King County 6-98) 21A-951

- B. Except for consolidations allowed by K.C.C. 21A.26.150, modifications which increase the overall height of the transmission structure or transmission equipment by more than 30 percent shall be subject to the following provisions:
- 1. Applications for such transmission structures shall be reviewed pursuant to the applicable process specified in this chapter; and
- 2. Such transmission structures shall comply with the provisions of K.C.C. 21A.26.020, K.C.C. 21A.26.060 through 21A.26.140, K.C.C. 21A.26.160 through 21A.26.190, and Ordinance 13129, and for minor communication facilities, in case of conflict, the provisions of Ordinance 13129 shall control. (Ord. 13129 § 25, 1998: Ord. 10870 § 503, 1993).
- 21A.26.150 Consolidation. Consolidation of two or more existing transmission structures may be permitted subject to the following:
- the consolidated transmission structure cannot meet the requirements of K.C.C. 21A.26.050, it shall be located on the portion of the parcel on which it is situated which, giving consideration to the following, provide the optimum practical setback from adjacent properties:
 - 1. Topography and dimensions of the site,
- 2. (in the case of a consolidation) to any existing structures to be retained, and
- 3. (in the case of a guyed transmission tower) to guy anchor placement necessary to assure structural integrity of the consolidated transmission tower.

Consolidated transmission structures shall be set back from abutting residential property a minimum of ten percent of the height of the consolidated transmission structure, but in all cases no less than 100 feet;

- B. If a consolidation involves the removal of transmission structures from two or more different sites and if a consolidated transmission structure is to be erected on one of those sites, it shall be erected on the site which provides for the greatest compliance with the standards of this chapter;
- C. All existing transmission equipment on the site of a communication facility which does not comply with the provisions of this chapter shall be relocated to the consolidated transmission structure before the relocation of transmission equipment from a non-exempt off-site, conforming communication facility is permitted;
- D. The consolidation shall eliminate NIER and electrical current levels attributable to the consolidating transmission equipment which exceed the limits of K.C.C. 21A.26.100 and 21A.26.130;
- E. Any transmission structure to be removed as part of a consolidation shall be removed within 12 months of relocation of the transmitting equipment;
- F. Consolidation shall result in a net reduction in the number of transmission structures; and
- G. Consolidated facilities shall require a conditional use permit. (Ord. 10870 § 504, 1993).
- 21A.26.160 Supplemental application requirements. A. In addition to any required site plan, a permit application for any communication facility shall also include:
- 1. A site plan which shows existing and proposed transmission structures; quy wire anchors; warning signs; fencing and access restrictions;
- 2. A report by a licensed professional engineer demonstrating compliance with applicable structural standards of the UBC, and describing the general structural capacity of any proposed transmission structure(s), including:
 - a. The number and type of antennas that can be accommodated; and
 - b. The basis for the calculation of capacity;

- 3. A report by a state licensed professional engineer that includes the following:
- a. A description of any proposed transmission tower(s) or structure(s), including height above grade, materials, color and lighting; and
- b. Information related to interference required by K.C.C. 21A.26.090.
- B. Where a permit for a non-exempt communication facility is required, the application shall also include the following information:
- 1. The name and address of the operator(s) of proposed and existing antennas on the site;
 - 2. The height of any proposed antennas;
 - 3. Manufacture, type, and model of such antennas;
 - 4. Frequency, modulation and class or service;
 - 5. Transmission and maximum effective radiated power;
 - 6. Direction of maximum lobes and associated radiation;
- 7. The calculated NIER levels attributable to the proposed antennas at points along the property line and other areas off-site which are higher than the property line points, as well as calculated power density (NIER levels) in areas that are expected to be unfenced on-site;
- 8. For a major communication facility, if there is another major communication facility within one mile of the site of the proposed facility, the level of NIER at the points identified in subsection B.7. as measured within 30 days prior to application; and
- 9. For a minor communication facility, if there is an existing major communication facility within one-half mile of the site of the proposed facility, the level of NIER at the points identified in subsection B.7. as measured within 30 days prior to the application. (Ord. 10870 § 505, 1993).
- 21A.26.170 Notification requirements. Notification of a permit application shall be given to adjacent property owners within a 500 foot radius and the local community council. The area within which mailed notice is required shall be expanded to include at least 20 different owners in rural or lightly inhabited areas or in other appropriate cases to the extent the department determines is necessary. The standards of published notice and posting of property required by K.C.C. 21A.42 shall be pursuant to K.C.C. 21A.40. (Ord. 10870 § 506, 1993).
- 21A.26.180 NIER compliance criteria. The department of public health shall consider the following criteria in determining compliance with K.C.C. 21A.26.100:
- A. The number and location of points at which levels have been determined to exceed NIER standards;
 - B. The duration of exposure to NIER levels above the standard;
- C. The extent by which the levels measured at such points exceed the standards established by this chapter; and
- D. The relative contribution of individual sources in a multiple source environment. (Ord. 10870 § 507, 1993).
- 21A.26.190 NIER enforcement. A. The department of public health shall be responsible for the enforcement of the provisions of K.C.C. 21A.26.100 in accordance with K.C.C. 23. The department director shall allow no more than 10 days to elapse from the date of a violation before corrective action is commenced. If this deadline cannot be met, the director shall issue a stop work order.
- B. If the approved NIER standard is exceeded in an area where there are multiple users and transmission equipment, all users shall share in the NIER

reductions, scaled proportionally to their current discharges. (Ord. 10870 § 508, 1993).

- 21A.26.200 Periodic review of NIER standard. The department of public health shall review the county approved NIER standard every three years and report to the chair of the council on whether it should be changed. 10870 § 509, 1993).
- 21A.26.210 State regulation. A. If state regulations establish a NIER exposure standard which is more restrictive than the county standard, the state standard shall automatically become effective.
- B. If such state standards are intended to preempt local enforcement with respect to specific sections of this chapter, said sections shall automatically be deemed ineffective.
- C. Application of the provisions of this chapter shall be subject to any rule, regulation, order or decision of any state or federal court or government agency with which such communication facility is obligated to comply. (Ord. 10870 § 510, 1993).
- 21A.26.300 Minor communication facilities preapplication community When a new transmission support structure is proposed, community meeting shall be convened by the applicant prior to submittal of an application.
- A. At least two weeks in advance, notice of the meeting shall be provided as follows:
- 1. Published in the local paper and mailed to the department and to the unincorporated area council serving the area in which potential sites are contemplated, and
- 2. Mailed notice shall be provided to all property owners within five hundred feet (or at least twenty of the nearest property owners, whichever is greater) as required by K.C.C. 21A.26.170 of any potential sites, identified by the applicant for possible development, to be discussed at the community meeting. When the proposed transmission support structure exceeds a height of one hundred twenty feet, the mailed notice shall be provided to all property owners within one thousand feet. The mailed notice shall at a minimum contain a brief description and purpose of the project, the estimated height, approximate location noted on an assessor map with address and parcel number, photo or sketch of proposed facility, a statement that alternative sites proposed by citizens can be presented at the meeting which will be considered by the applicant, a contact name and telephone number to obtain additional information and other information deemed necessary by King County. Because the purpose of the community meeting is to promote early discussion, applicants are encouraged to note any changes to the conceptual information presented in the mailed notice when they submit an application.
- B. At the community meeting at which at least one employee of the department of development and environmental services, assigned by the director of the department, shall be in attendance, the applicant shall provide information relative to existing transmission support structures and other nonresidential structures, such as water towers and electrical transmission lines, within one-quarter mile of potential sites, and shall discuss reasons why those existing structures are unfeasible. Furthermore, any alternative sites within one-quarter mile, identified by community members and provided to the applicant in writing at least five days in advance of the meeting, shall

be evaluated by the applicant to the extent possible given the timeframe, and discussed at the meeting. A listing of the sites, identified in writing and provided to the applicant at or before the community meetings, shall be submitted to the department with the proposed application. Applicants shall also provide a list of meeting attendees and those receiving mailed notice and a record of the published meeting notice at the time of application submittal. (Ord. 13129 § 2, 1998).

21A.26.310 Minor communication facilities - review process. Minor communication facilities shall be reviewed as follows:

MINOR COMMUNICATION FACILITIES - REVIEW PROCESS

Zone	Antenna	Transmission
District(s)		Support Structure
I, RB, CB NB, O	Р	$\overset{\mathbf{C}}{D}$
F, M	P	P C ¹
UR, RA, A	Р	P ² C ^{1 and 2}
R1 - R48	Р	$\overset{\text{P}}{\text{C}^1}$

P - Permitted Use

(Ord. 13129 § 3, 1998).

C - Conditional Use

¹ If the proposal exceeds the development standards of this chapter contained in K.C.C. 21A.26.320 for transmission support structures, the proposal shall be reviewed through this process.

 $^{^2}$ The proposed transmission support structure shall not be located on any RA or A zoned site for which the development rights have been encumbered by the farmlands preservation program.

21A.26.320 Minor communication facilities - development standards for transmission support structures. A new transmission support structure exceeding the standards of this section are subject to the conditional use permit process as outlined in K.C.C. 21A.26.310. These provisions do not apply to transmission support structures that are being modified or replaced pursuant to the provisions of K.C.C. 21A.26.380 or replace an existing transmission support structure.

MINOR COMMUNICATION FACILITIES - DEVELOPMENT STANDARDS

Zone	Height and Location	Setbacks 1
District(s)	Of Tower	
I	140 feet high	50 feet (or one foot setback for every one foot in height) from any UR, RA, A, or R1 - R48 zone property, whichever provides the greatest setback
RB, CB	120 feet high	SAME AS ABOVE
NB, O, UR, RA, A, R1 - R48	60 feet high	SAME AS ABOVE
F, M	140 feet high	SAME AS ABOVE

 $^{
m l}$ Setbacks may be modified to achieve additional screening, see K.C.C. 21A.26.330C or as provided in K.C.C. 21A.26.050.

(Ord. 13129 § 4, 1998).

- 21A.26.330 Minor communication facilities visual compatibility standards. With consideration to engineering and structural requirements, and the coverage patterns the provider is seeking to achieve, minor communication facilities shall be subject to the following visual compatibility standards in addition to K.C.C. 21A.44.040.
- A. Antenna should, to the extent practicable, reflect the visual characteristics of the structure to which it is attached. This should be achieved through the use of colors and materials, as appropriate. located on structures such as buildings or water towers, the placement of the antenna on the structure should reflect the following order of priority in order to minimize visual impact:
- 1. A location as close as possible to the center of the structure, and
- 2. Along the outer edges or side-mounted, provided that in this instance, additional means such as screens should be considered and may be required by the department on a case-by-case basis, and
- 3. When located on the outer edge or side-mounted, be placed on the portion of the structure less likely to be seen from adjacent lands containing, in descending order of priority: existing residences, public parks and open spaces, and public roadways.

- B. To the extent that there is no conflict with the color and lighting requirements of the Federal Communication Commission and the Federal Aviation Administration for aircraft safety purposes, transmission support structures shall be designed to blend with existing surroundings to the extent feasible. This should be achieved through the use of compatible colors and materials, and alternative site placement to allow the use of topography, existing vegetation or other structures to screen the proposed transmission support structure from adjacent lands containing, in descending order of priority: existing residences, public parks and open spaces, and public roadways.
- C. The setback provisions of K.C.C. 21A.26.320 may be waived by the department or the examiner, in order to achieve greater levels of screening than that which would be available by using the stated setback, during the course of the review process described in K.C.C. 21A.26.310. In waiving the requirement, the department or examiner shall consider the protection of adjacent lands on the basis of the priorities stated in subsections A and B of this section. (Ord. 13129 § 5, 1998).
- 21A.26.340 Minor communication facilities additional standards to reduce degree of visual impact. The department shall also consider the following criteria and give substantial consideration to on-site location and setback flexibility authorized in K.C.C. 21A.26.330C when reviewing applications for new free-standing towers and determining appropriate levels of mitigation:
- A. Whether existing trees and vegetation can be preserved in such a manner that would most effectively screen the proposed tower from residences on adjacent properties;
- B. Whether there are any natural land-forms, such as hills or other topographic breaks, that can be utilized to screen the tower from adjacent residences;
- C. Whether the applicant has utilized a tower design that reduces the silhouette of the portion of the tower extending above the height of surrounding trees; and
- D. Whether the factors of subsections B and C can be addressed and the height of the proposed tower be reduced and still provide the level of coverage proposed by the applicant. (Ord. $13129 \ \S 17$, 1998).
- 21A.26.350 Minor communication facilities time limits and establishment period. The building permit shall become null and void if construction of the transmission support structure has not begun within one year after the effective date of permit approval or if antennas are not installed within one hundred eighty days after construction of the transmission support structure. Extensions shall be allowed only in accordance with the criteria specified for building permit extensions in K.C.C. 16.04.05013. (Ord. 13129 § 6, 1998).
- 21A.26.360 Minor communication facilities cessation of use. Antenna shall be removed from transmission support structures within one hundred eighty days after the antenna is no longer operational. Transmission support structures for wireless communication facilities shall be removed within one year of the date the last antenna is removed. (Ord. 13129 § 7, 1998).

- 21A.26.370 Minor communication facilities collocation. application for a conditional use permit or a building permit for a new freestanding tower, whichever is required first, the applicant shall provide a map showing all existing transmission support structures or other suitable nonresidential structures located within one-quarter mile of the proposed structure with consideration given to engineering and structural requirements. No new transmission support structure shall be permitted if an existing structure suitable for attachment of an antenna or collocation is located within one-quarter mile, unless the applicant demonstrates that the existing structure is physically or technologically unfeasible pursuant to K.C.C. 21A.26.420, or is not made available for sale or lease by the owner, or is not made available at a market rate cost, or would result in greater visual impact as described in K.C.C. 21A.26.330. The burden of proof shall be on the applicant to show that a suitable structure for mounting of antenna or collocation cannot be reasonably or economically used in accordance with these criteria.
- B. Prior to the receipt of a building permit to construct a new tower, the applicant shall file a letter agreeing to allow collocation on the tower with the department. The agreement shall commit the applicant to provide, either at a market rate cost or at another cost basis agreeable to the affected parties, the opportunity to collocate the antenna of other service providers on the applicant's proposed tower to the extent that such collocation is technically and structurally feasible for the affected parties. (Ord. 13129 § 8, 1998).
- 21A.26.380 Minor communication facilities modifications. modifications consistent with the provisions of K.C.C. 21A.26.390 are permitted outright. Modifications to transmission support structures are also permitted outright, provided there is no increase in the height of the transmission support structure. Increases to the height of an existing transmission support structure are also permitted outright, provided that the increase is:
- A. Necessary to accommodate the actual collocation of the antenna of other service providers, or to accommodate the current providers antenna required to utilize new technology, such as digital transmissions;
- B. Limited to no more than forty feet above the height of the existing transmission support structure ; and
- C. Proposed in a residential zone and the proposed height exceeds sixty feet and is demonstrated by the applicant to be required to meet the proposed area of coverage. If proposed in a residential zone, notice and a comment period shall be provided consistent with the provisions of K.C.C. 20.20.060. If the need for additional height is challenged within the comment period specified, technical evaluation as provided for in K.C.C. 21A.26.450 shall be conducted. The department may approve, require additional mitigation, or deny the proposed height increase on the basis of this technical evaluation. (Ord. 13149 § 9, 1998).
- 21A.26.390 Minor communication facilities antennas. Antennas meeting the standards of this section are permitted outright. An antenna shall not extend more than six feet horizontally from any structure to which it is attached. Furthermore, an antenna shall not extend vertically above the uppermost portion of the structure to which it is mounted or attached, as follows:
 - A. Not more than twenty feet on a nonresidential structure, and
- B. Not more than fifteen feet on a residential structure. (Ord. 13149 § 10, 1998).

- 21A.26.400 Minor communication facilities location within street, utility and railroad rights-of-way. The mounting of antenna upon existing or replacement structures, such as light and power poles, located within publicly or privately maintained street, utility and railroad right-of-ways is permitted outright. However, minor communication facilities within street, utility and railroad right-of-way that propose the construction of a separate structure used solely for antenna shall be subject to the zoning provisions applicable to the property abutting the portion of right-of-way where the structure is proposed except that the setbacks specified in the zoning code shall not apply. Setbacks shall be those specified in the road design standards. In cases where the abutting property on either side of the right-of-way has different zoning, the more restrictive zoning provisions shall apply. (Ord. 13129 § 11, 1998).
- 21A.26.410 Minor communication facilities public parks and open spaces owned by King County. Within public parks and open spaces owned by King County, the placement of antennas on existing structures, such as power poles, light poles for streets and parking lots, light standards for recreational fields and communication towers, is the preferred option. If an existing structure cannot accommodate an antenna due to structural deficiency, or does not have the height required to provide adequate signal coverage, the structure may be replaced with a new structure provided that the new structure will serve the original purpose and not exceed the original height by forty feet. Any height increase in excess of forty feet will require a conditional use permit.

The construction of a new free-standing tower within public parks and open spaces owned by King County shall be subject to a conditional use permit when the height of the proposed tower exceeds sixty feet. (Ord. 13129 § 14, 1998).

- 21A.26.420 Minor communication facilities criteria for determining technical feasibility. When an applicant is required to demonstrate that an existing structure is not technically feasible for collocation, the evidence submitted to corroborate that finding may consist of any of the following:
- A. No existing structures are located within the geographic area required to meet the applicant's proposed area of coverage.
- B. Existing structures are not of sufficient structural strength to support the applicant's proposed antenna and related equipment.
- C. Existing structures are not of sufficient height required to meet the applicant's proposed area of coverage or allow microwave connection to other sites operated by the applicant.
- D. The applicant's proposed antenna would cause interference between the proposed and existing antenna, and that even the additional height permitted for collocations pursuant to K.C.C. 21A.26.380 would not ensure enough separation to avoid such interference. (Ord. 13129 § 16, 1998).
- 21A.26.430 Minor communication facilities applicability to vested applications. The standards of Ordinance 13129 shall not apply to vested applications for conditional use permits and building permits for transmission support structures. Furthermore, the standards, except for the antenna mounting provisions of K.C.C. 21A.26.390, shall not apply to new building permits required to construct a transmission support structure that been authorized through a prior-vested or prior-approved conditional use or special use permit. (Ord. 13129 § 18, 1998).

21A.26.440 Minor communication facilities - standards within city potential annexation areas. Within the approved potential annexation areas of a city, the agreed upon permitting jurisdiction shall apply the provisions of the applicable city as provided for by an interlocal agreement that has been entered into between the city and the county. The city standards would be applied when adopted in an ordinance by King County. (Ord. 13129 § 21, 1998).

21A.26.450 Minor communications facilities - technical evaluation. department of development and environmental services shall retain the services of a registered professional electrical engineer accredited by the state of Washington who holds a Federal Communications General Radio telephone Operator The engineer will provide technical evaluation of permit applications for minor communications facilities. The department authorized to charge the applicant for these services. The specifications for an RFP to retain a consulting engineer shall specify at least the qualifications noted above, the capacity to provide a three week turnaround on data review, a request for a proposed fixed fee for services and shall state a preference for a qualified professional with a balance of experience in both the private and public sectors. Such a review shall be performed in a timely manner, be limited to the data necessary to establish findings pursuant to K.C.C. 21A.26.420C and 21A.26.420D, and avoid any conflicts with the department's duty to review permit applications within one hundred twenty days of acceptance pursuant to RCW 36.70B.090. This review shall be performed when requested by affected residents pursuant to K.C.C. 21A.26.380. (Ord. 13129 § 22, 1998).

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